

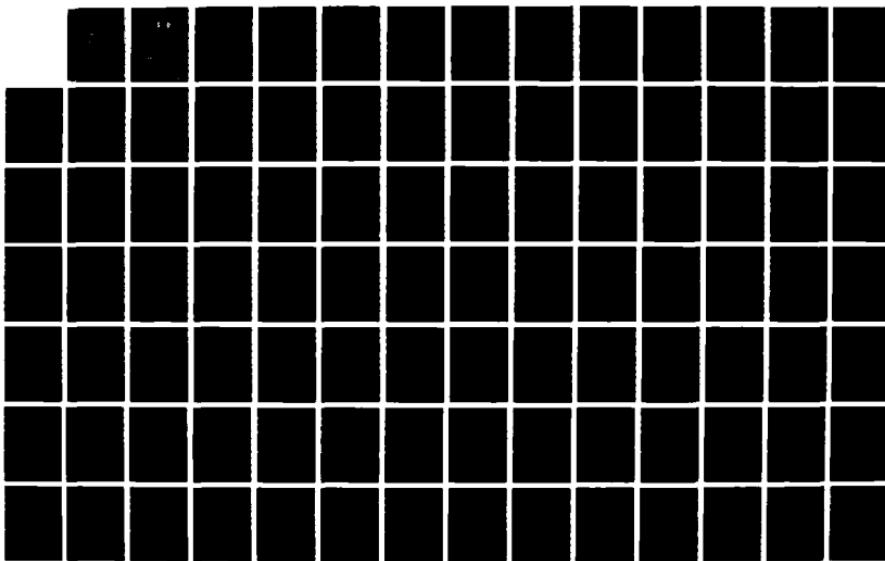
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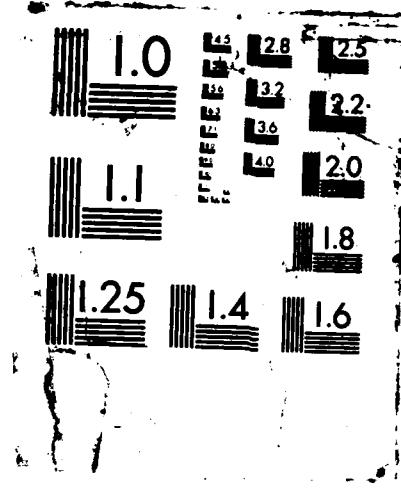
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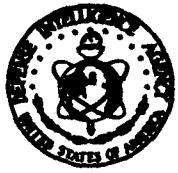
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20. ABSTRACT → This is the Soviet Laser Bibliography for May-June 1986, and is No. 83 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications systems; beam propagation; adaptive optics; computer technology; holography; laser- induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; laser spectroscopy; beam-target interaction; and plasma generation and diagnostics. ←		

INTRODUCTION

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is May-June 1986, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Soviet Reference Journals (journals of abstracts) are also included. Laser items from the popular or semipopular press are generally omitted. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library.

Since our computer is not now able to print between lines, superscripts and subscripts are indicated by (sup) and (sub).

We are producing the entire bibliography on computer. To make our bibliography compatible with other data bases, for source abbreviations, we use the letter codens generally used in our own government rather than transliterations of abbreviations used in the Soviet Union. Likewise, we use letter codens to designate affiliations. The authors' affiliations are indicated in parentheses after the authors' names in the text. Empty parentheses indicate that the affiliation was not given. A source abbreviations list, authors' affiliations list, and author index are included in the back of the bibliography.

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I. BASIC RESEARCH

A. SOLID STATE LASERS

1. Crystal

a. Miscellaneous

1. Abdulsabirov, R.Yu.; Dubinskiy, M.A.; Korabileva, S.L.; Mityagin, M.V.; Silkin, N.I.; Skripko, G.A.; Shkadarevich, A.P.; Yagudin, Sh.I. (KaGU; BPI). Tuneable KZnF₃:Cr³⁺ crystal laser with non-selective pumping. KRISA, no. 3, 1986, 600-601.
2. Alimpiyev, A.I.; Bukin, G.V.; Matrosov, V.N.; Pstryakov, Ye.V.; Solntsev, V.P.; Trunov, V.I.; Tsvetkov, Ye.G.; Chebotayev, V.P. (ITF). Tunable BeAl₂O₄:Ti³⁺ laser. KVEKA, no. 5, 1986, 885-886.
3. Gorobchenko, V.S.; Naboykin, Yu.V.; Ogurtsova, L.A.; Pokrovskaya, F.S. (FTIANUk). Stimulated emission from diphenyl crystals with anthracene impurities in the region of low-temperature matrix phases. FNTED, no. 6, 1986, 652-655.
4. Kaminskiy, A.A. (). Laser crystals: advances and basic trends in research. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 5-61.
5. Kaminskiy, A.A.; Mill', B.V.; Sarkisov, S.E. (). Crystal chemistry, optics and spectroscopy of laser crystals with a Ca-gallogermanate structure. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 197-234.
6. Kravchenko, V.B. (). Crystal chemistry problems of isomorphism in laser crystals. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 180-197.
7. Kruglik, G.S.; Skripko, G.A.; Shadarevich, A.P.; Kondratyuk, N.V.; Zhdanov, E.A. (BPI). Emission characteristics of an Al₂O₃:Ti³⁺ crystal laser under coherent pumping. KVEKA, no. 6, 1986, 1207-1213.
8. Krumin', A.E.; Kuz'minov, Yu.S.; Odulov, S.G.; Polozkov, N.M.; Seglin'sh, Ya.A. (IOF; NIIFTT). Optical oscillator with frequency-degenerate pumping utilizing a BSN:Ce crystal. KVEKA, no. 5, 1986, 1037-1039.

9. Prokhorov, A.M. (). New generation of solid state lasers. UFNAA, v. 148, no. 1, 1986, 7-33. (RZFZA, 86/5L1102).
 10. Shkadarevich, A.P.; Nikanovich, M.V.; Reyterov, V.M.; Umreyko, D.S.; Yarmolkevich, A.R. (). Luminescence and stimulated emission from M_A color centers in MgF₂:Li crystals. PSSAB, v. A92, no. 2, 1985, K135-K137. (RZFZA, 86/6L960).
 11. Skripko, G.A.; Shkadarevich, A.P. (). Stimulated emission in Al₂O₃ crystals activated by titanium and vanadium ions. Fizika i spektroskopiya lazernykh kristallov. IKAN. Nauka, 1986, 257-268.
 12. Yermolayev, V.L.; Sveshnikova, Ye.B. (). Experimental laws governing nonradiative transitions in activator crystals and their interpretation with positions of the inductive resonance theory. Fizika i spektroskopiya lazernykh kristallov. IKAN. Nauka, 1986, 163-179.
 13. Zharikov, Ye.V.; Il'ichev, N.N.; Kalitin, S.P.; Laptev, V.V.; Malyutin, A.A.; Osiko, V.V.; Pashinin, P.P.; Prokhorov, A.M.; Saidov, Z.S.; Smirnov, V.A.; Umyakov, A.F.; Shcherbakov, I.A. (IOF). Spectral-luminescent and lasing properties of a chromium and erbium-doped yttrium-scandium-gallium garnet crystal. KVEKA, no. 5, 1986, 973-979.
- b. Ruby
14. Asayenok, N.A.; Ivanov, N.A.; Koval'chuk, A.S.; Loyko, M.M.; Chepurnoy, V.A.; Skadarevich, A.P. (). Ruby laser with a passive shutter based on a LiF crystal with F⁺(sub2) color centers. ZPSBA, v. 44, no. 6, 1986, 932-935.
 15. Pilipovich, V.A.; Kovalev, A.A.; Levashkevich, L.V. (). Dynamics of the formation of ultrashort pulses in a ruby laser with a passive electrooptical shutter. ZPSBA, v. 44, no. 6, 1986, 936-942.

c. LiF

2. Rare Earth

a. Miscellaneous

16. Kaminskiy, A.A.; Markosyan, A.A.; Pelevin, A.V.; Polyakova, Yu.A.; Sarkisov, S.E.; Uvarova, T.V. (IKAN). Luminescence properties and stimulated emission from Pr³⁺, Nd³⁺ and Er³⁺ in a tetragonal lithium-lutecium fluoride. IVNMA, no. 5, 1986, 870-873.
 17. Kaminskiy, A.A.; Perlin, Yu.Ye. (). Nonradiative transitions in three-valent lanthanides in dielectric crystals. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 125-150.
 18. Petrosyan, A.G. (). Elementary processes in the formation of inhomogeneities in complex oxides with Ln³⁺ ions for obtaining stimulated emission. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 235-256.
 19. Pukhov, K.K.; Sakun, V.P. (). Nonlinear mechanism of multiphonon nonradiative transitions in three-valent lanthanides in crystals. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 150-163.
- b. Nd³⁺
20. Gondra, A.D.; Gradov, V.M.; Zharikov, Ye.V.; Terent'yev, Yu.N.; Shcherbakov, A.A.; Shcherbakov, I.A. (IOF). Efficiency limit of neodymium-activated crystal lasers. IOF. Preprint, no. 5, 1986, 21 p. (RZRAB, 86/6Yel14).
 21. Jankiewicz, Z.; Mindak, M.; Szydlak, J.; Wojcik, J. (). Analysis of the thermal focusing effect in a c-w Nd:YAG laser (in English). OPAPB, no. 2, 1985, 125-134. (RZRAB, 86/6Yel7).
 22. Kaminskiy, A.A.; Markosyan, A.A.; Pelevin, A.V.; Polyakova, Yu.A.; Uvarova, T.V. (IKAN). Cd(1-x)Sc(subx)F(2+x) monocrystal with Nd³⁺ ions and its stimulated emission. IVNMA, no. 5, 1986, 873-875.
 23. Kaminskiy, A.A.; Mill', B.V.; Butashin, A.V.; Sarkisov, S.E.; Nikol'skaya, O.K. (). Two stimulated emission channels in Nd³⁺ in Ca₃[Nb,Ga]₂Ga₃O₁₂ crystals. IVNMA, no. 12, 1985, 2093-2095. (RZFZA, 86/5L1108).

c. Er³⁺

24. Antipenko, B.M.; Buchenkov, V.A.; Nikitichev, A.A.; Sobolev, B.P.; Stepanov, A.I.; Sukhareva, L.K.; Uvarova, T.V. (). Optimization of a BaYb₂F₈:Er laser medium. KVEKA, no. 6, 1986, 1155-1160.
25. Kostanyan, R.B.; Sanamyan, T.V. (). Study on lifetimes of erbium levels in lutecium-aluminum garnet. DANAA, no. 3, 1985, 123-130. (RZFZA, 86/5L1143).

d. Ho³⁺

26. Alpat'yev, A.N.; Zharikov, Ye.V.; Kalitin, S.P.; Laptev, V.V.; Osiko, V.V.; Ostroumov, V.G.; Prokhorov, A.M.; Sandov, Z.S.; Smirnov, V.A.; Sorokina, I.T.; Umyakov, A.F.; Shcherbakov, I.A. (IOF). Lasing from holmium ions at the ⁵I₇ to ⁵I₈ transition at room temperature in yttrium-scandium-gallium garnet with chromium, thulium and holmium ions. IOF. Preprint, no. 26, 1985, 8 p. (RZFZA, 86/6L964).

e. Tm³⁺

3. Semiconductor

a. Theory

27. Alferov, Zh.I.; Tsarenkov, B.V. (FTI). Thirty-five years of A^{III}B^V semiconductors. FTPPA, no. 12, 1985, 2113-2117.
28. Andronov, A.A.; Nozdrin, Yu.N.; Shastin, V.N. (IPF). Tunable lasers in the far IR using hot holes in semiconductors. IANFA, no. 6, 1986, 1103-1110.
29. Basov, N.G.; Yeliseyev, P.G.; Popov, Yu.M. (). Semiconductor lasers. UFNAA, v. 148, no. 1, 1986, 35-53. (RZFZA, 86/5L1113).
30. Kudykina, T.A.; Lisitsa, M.P. (). Refractive index dispersion of semiconductors in the region of a self-absorbing edge. ZPSBA, v. 44, no. 5, 1986, 838-845.
31. Kurbatov, A.L.; Shubin, M.V.; Polchkova, N.D.; Baranova, N.N.; Rodin, N.V. (GOI). Tunable semiconductor lasers and their application. GOI. Trudy, no. 192, 1985, 154-163. (RZFZA, 86/5L1304).

32. Senoner, M.; Voigt, J. (). N_(sub2) laser pumped CdS(x)Se(1-x) platelet lasers (in English). EXPPA, no. 5, 1985, 387-396. (RZFZA, 86/5L1112).
33. Starikov, Ye.V.; Shiktorov, P.N. (IFPV). Efficiency of solid-state radiation sources based on three-dimensional effects in p-type germanium. FTPPA, no. 6, 1986, 1076-1082.
 - b. Misceilaneous Homojunction
 - c. Miscellaneous Heterojunction
34. Alferov, Zh.I.; Gurevich, S.A.; Markova, R.V.; Marakhonov, V.M.; Nikishin, S.A.; Portnoy, Ye.L.; Sinitsyn, M.A.; Sinyavskiy, D.V.; Timofeyev, F.N.; Fedorovich, A.Ye.; Yavich, B.S. (FTI). C-w single-frequency GaAlAs injection lasers, obtained by a hybrid technology with the use of methods of gas phase and liquid phase epitaxy. PZTFD, no. 10, 1986, 577-582.
35. Alferov, Zh.I.; Zhabaridze, R.O.; Ivanov, S.V.; Kop'yev, P.S.; Ledentsov, N.N.; Mel'tser, B.Ya.; Ustinov, V.M. (FTI). Laser based on a heterostructure with an active region limited by a single-layer superlattice. PZTFD, no. 9, 1986, 562-565.
36. An, V.A.; Nikishin, S.A.; Portnoy, Ye.L.; Sinyavskiy, D.V. (FTI). Effect of the conditions of growth on the parameters of multiwave double heterostructure lasers. ZTEFA, no. 6, 1986, 1142-1149.
37. Baranov, A.N.; Dzhurtanov, B.Ye.; Imenkov, A.N.; Shernyakov, Yu.M.; Yakovlev, Yu.P. (FTI). GaAlAsSb/GaSb/GaInAsSb injection heterolaser with a dual channel waveguide (double heterostructure 2 KV at 2 um), operating at room temperature. PZTFD, no. 9, 1986, 557-561.
38. Baranov, A.N.; Dzhurtanov, B.Ye.; Imenkov, A.N.; Rogachev, A.A.; Shernyakov, Yu.M.; Yakovlev, Yu.P. (FTI). Quantum-dimension laser with a single heterojunction. PZTFD, no. 11, 1986, 664-668.
39. Bessonov, Yu.L.; Kornilova, N.B.; Kurnosov, V.D.; Morozov, V.N.; Shidlovskiy, V.R. (FIAN). Linewidth of single-frequency GaAlAs injection lasers. KVEKA, no. 5, 1986, 1070-1072.

40. Borodkin, A.A.; Borodulin, V.I.; Wagner, N.A.; Voskoboinikova, I.V.; Goldobin, I.S.; Grekova, S.N.; Morozov, V.I.; Pashko, O.A.; Shveykin, V.I. (FIAN). Heterostructure injection lasers and integrated laser-photodetector pairs with resonators produced by microspalling. KVEKA, no. 6, 1986, 1195-1200.
41. Borodulin, V.I.; Wagner, I.A.; Gulyayev, Yu.V.; Pashko, O.A.; Tregub, D.P.; Elenkrig, B.B. (IRE). Watt-ampere characteristics of injection lasers with coupled resonators. ZTEFA, no. 6, 1986, 1213-1215.
42. Borodulin, V.I.; Wagner, N.A.; Pashko, O.A.; Tregub, D.P.; Elenkrig, B.B. (IRE). Dynamic stability of injection lasers with coupled resonators. ZTEFA, no. 6, 1986, 1244-1246.
43. Mikayelyan, G.T.; Sverdlov, A.I.; Sokolov, S.N. (). Spectral properties of radiation from heterostructure injection lasers with a crescent-shaped active region. KVEKA, no. 6, 1986, 1255-1258.
- d. GaAs
- e. CdS
44. Bogdankevich, O.V.; Golubkov, G.G.; Zverev, M.M.; Kopyt, S.P.; Pevtsov, V.F. (). Study on the spectral and time characteristics of CdS semiconductor lasers pumped by a pulsed e-beam. Elementarnyye protsessy v khimicheski reagiruyushchikh sredakh. Moskva, 1985, 22-26. (RZFZA, 86/5L1110).
- f. ZnSe
- g. Pb(1-x)Sn(x)Te
- h. InGaAsP
45. Garbuzov, D.Z.; Zaytsev, S.V.; Nivin, A.B.; Ovchinnikov, A.V.; Tarasov, I.S.; Komissarov, A.B.; Trukan, M.K. (FTI). C-w mesa band double heterostructure separately limited InGaAsP/InP lasers at 1.3 um with threshold lowering and a power increase. PZTFD, no. 11, 1986, 660-663.
46. Vasil'yev, M.G.; Goldobin, I.S.; Kodin, N.V.; Kurnyavko, Yu.V.; Rachkov, I.A.; Solodkov, A.F.; Yakubovich, S.D. (VNIIOFI). Analog frequency modulation of single-mode heterojunction laser radiation in the 1.3 um spectral region. KVEKA, no. 6, 1986, 1267-1269.

4. Glass

a. Miscellaneous

b. Nd

47. Dzhibladze, M.I.; Isayev, S.K.; Melikishvili, Z.G.; Esiashvili, Z.G. (TbGU). Spectral characteristics of a fiber glass neodymium laser. KVEKA, no. 6, 1986, 1270-1271.
48. Hribek, P.; Vrbova, M. (). Nd glass laser with a plasma mirror (in English). CZYPA, v. B35, no. 12, 1985, 1331-1340. (RZFZA, 86/6G133).
49. Nagibin, Yu.T. (). Thermal optic distortion of a solid laser active element in a transient state and in a pumping pulse process. VINITI. Deposit, no. 1380-V86. (ZPSBA, v. 44, no. 5, 1986, 868).

c. Er

B. LIQUID LASERS

1. Organic Dyes

a. Miscellaneous

50. Bondar, M.V.; Przhonskaya, O.V.; Tikhonov, Ye.A.; Fedotkina, N.M. (IFANUK). Thermooptics of the impurities of elastomers. ZTEFA, no. 5, 1986, 878-883.
51. Hartmann, H.; Hultzsch, R.; Ilge, H.D.; Friedrich, B.; Hebenstreit, J.; Fassler, D. (). Laser active medium for dye lasers. Patent GDR, no. 225884, 7 Aug 1985. (RZRAB, 86/6Ye99).
52. Levin, M.B.; Reva, M.G.; Rodchenkova, V.V.; Uzhinov, B.M. (MGU). Relationship between radiative and radiationless ways of energy transfer in oscillating systems. KVEKA, no. 6, 1986, 1272-1275.
53. Potapov, A.I.; Sinikas, A.G.; Smirnov, A.Yu. (). Numerical modeling of the dynamics of internal energy processes in dye lasers. TsNIITEIpriboro. Deposit, no. 3110-pr, 25 Nov 1985, 151-166. (RZFZA, 86/6L933).
54. Yegorov, K.D.; Nekhayenko, V.A.; Perhsin, S.M.; Pleshakov, S.A.; Podshivalov, A.A.; Shuvalov, V.V. (MGU). Synchronously pumped picosecond dye laser with an additional superthin resonator. KVEKA, no. 6, 1986, 1169-1174.

55. Yuzhakov, V.I. (MGU). Migration of the electronic excitation energy in tunable lasers utilizing multicomponent dye soutions. KVEKA, no. 6, 1986, 1118-1131.
- b. Rhodamine
56. Bondarev, B.V.; Kobtsev, S.M.; Sorokin, V.B. (NGU). C-w wideband dye laser. PRTEA, no. 3, 1986, 245-246.
57. Krindach, D.P.; Yakovlev, A.G. (MGU). Combined mode locking in a c-w rhodamine 6G laser using triphenylmethane dyes. KVEKA, no. 6, 1986, 1284-1287.
58. Levin, M.B.; Cherkasov, A.S. (). Study on induced absorption in aqueous micellar rhodamine 6G solutions under flashlamp pumping. ZPSBA, v. 43, no. 6, 1985, 972-978.
- c. Polymethine
59. Dokukina, A.F.; Yeremeyeva, Ye.P.; Ivanova, T.F.; Ishchenko, A.A.; Kol'chevskaya, T.O.; Piterkin, B.D.; Smirnova, Z.A.; Tolmachev, A.I. (). Factors determining the shape of long-wave absorption bands of polymethine dyes in polymer matrices. OPSPA, vol. 60, no. 5, 1986, 937-942.
- d. Coumarin
- e. Phthalimide
- f. Cyanine
- g. Xanthene
- h. POPOP

2. Inorganic Liquids

C. GAS LASERS

1. Theory

60. Basov, N.G.; Danilychev, V.A. (). Condensed- and compressed-gas lasers. UFNAA, v. 148, no. 1, 1986, 55-100. (RZFZA, 86/5L1063).
61. Basov, N.G.; Danilychev, V.A.; Dolgikh, V.A.; Kerimov, O.M.; Myznikov, Yu.F.; Soroka, A.M. (FIAN). Ultimate specific energy input into hydrogen and the role of vibrational-to-vibrational processses. KVEKA, no. 6, 1986, 1161-1168.

62. Devdariani, A.Z.; Ostrovskiy, V.N. (). Exothermal charge exchange with ion excitation: extrapolation of cross-sections into the range of thermal collisions. OPSPA, vol. 60, no. 5, 1986, 904-909.
63. Mesyats, G.A.; Korolev, Yu.D. (). High-pressure space charges in gas lasers. UFNAA, v. 148, no. 1, 1986, 101-122. (RZFZA, 86/5L1064).

2. Simple Mixtures

a. Miscellaneous

b. He-Ne

64. Gonchukov, S.A.; Kireyev, S.V.; Protsenko, Ye.D. (MIFI). Frequency resonances in a three-mode laser with a nonlinearly absorbing cell. KVEKA, no. 6, 1986, 1259-1261.
65. Krylov, P.S. (VNIIM). Feed source of an active element He-Ne/(supl27)I(sub2) laser. PRTEA, no. 3, 1986, 191-193.
66. Popescu, Gh. (). Single-frequency He-Ne laser. Patent Romania, no. 86597, 30 Apr 1985. (RZRAB, 86/6Ye63).
67. Popov, A.I.; Sagadeyev, A.M.; Sadchikhin, A.V. (). Physical characteristics of the 3.3922 and 3.3912 μm transitions of a helium-neon laser. ZPSBA, v. 44, no. 6, 1986, 1009-1012.
68. Udal'tsov, B.V.; Tsar'kov, V.A. (). Reactive oscillations in a two-anode symmetrical neon-helium laser discharge. RAEIA, no. 5, 1986, 938-944.

c. He-Xe

d. He-Kr

e. Ar-Xe

3. Molecular Beam and Ion

a. Miscellaneous

b. Carbon Dioxide

69. Antipov, V.N.; Fishman, I.S. (). Fine retuning of CO₂ laser radiation frequency within the limits of a single amplification contour. ZPSBA, v. 44, no. 6, 1986, 1034.

70. Baranov, V.Yu.; Drckov, G.F.; Kuz'menko, V.A.; Mezhevov, V.S.; Pigul'skaya, V.V. (IAE). Stabilization of the composition of a gas medium of a repetitively pulsed CO₂ laser with the use of hopcalite. KVEKA, no. 5, 1986, 989-992.
71. Bel'tyugov, V.N.; Kuznetsov, A.A.; Ochkin, V.N.; Sobolev, N.N.; Troitskiy, Yu.V.; Udalov, Yu.B. (FIAN). Use of a combined resonator to broaden the band of continuous tuning of a gas laser frequency. KVEKA, no. 5, 1986, 932-936.
72. Bykov, A.D.; Galushkin, M.G.; Zarubin, P.V.; Lyakishev, V.G.; Rodionov, V.I.; Seregin, A.M.; Ulenikov, O.N.; Ustinov, N.D.; Cheburkin, N.V. (). Spectral characteristics of (sup12)C(sup18)O(sub2) lasers. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 164-168.
73. Deryugin, A.A.; Likhanskiy, V.V.; Napartovich, A.P. (IAE). Sound vibrations in a gas-flow CO₂ laser with an unstable resonator. KVEKA, no. 5, 1986, 950-955.
74. Dubrovskiy, G.V.; Strel'chenya, V.M. (). Relaxation of anharmonic molecules. ZPMFA, no. 3, 1986, 22-31.
75. Kamenicky, I. (). The ELA-001-A high-power c-w CO₂ laser (in Slovakian). Trend VUMA, no. 4, 1985, 15-23. (RZFZA, 86/5L1073).
76. Karlov, N.V.; Kisletsov, A.V.; Kovalev, I.O.; Kuz'min, G.P.; Movshev, V.G.; Nesterenko, A.A.; Prokhorov, A.M.; Toker, G.R. (IOF). Electric discharge high-pressure CO₂ laser with a plasma cathode. PZTFD, no. 10, 1986, 617-622.
77. Kon'kov, A.A.; Lotkova, E.N.; Ponomarev, D.I.; Yuzhakova, I.P. (FIAN). Selective attachment to the radiating element of an ILGN-706 CO₂ laser. PRTEA, no. 3, 1986, 189-191.
78. Orishich, A.M.; Posukh, V.G.; Snytnikov, V.N. (ITPM). Effect of the injection of external radiation on the stimulated emission from an unstable-resonator TEA laser. KVEKA, no. 6, 1986, 1292-1294.
79. Solodukhin, A.S.; Trushin, S.A. (). CO₂ laser operating in the 4.3 and 10.6 um region. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 313.

80. Vol'skaya, S.P.; Tselykovskiy, A.F. (). Metal-ceramic waveguide CO₂ laser with radio-frequency pumping. IVUBA, no. 2, 1986, 85-88. (RZFZA, 86/6L911).
81. Yermachenko, V.M.; Petrovskiy, V.N.; Protsenko, Ye.D.; Rurukin, A.N.; Shananin, R.A. (). Frequency characteristics of a dual-mode CO₂ laser with a phase-anisotropic resonator. ZPSBA, v. 44, no. 6, 1986, 942-947.
82. Zybin, D.N.; Lipatov, N.I.; Pashinin, P.P.; Petrov, A.N.; Prokhorov, A.M.; Yurov, V.Yu. (). Ln_(subl-x)Sr_(subx)CoO_(sub3)[Ln:La, Nd] oxides for cathodes of waveguide CO₂ lasers. PZTFD, no. 10, 1986, 622-627.
- b. Carbon Monoxide
- c. Noble Gas
83. Apolonskiy, A.A.; Donin, V.I.; Timofeyev, T.T. (IAESOAN). High-power ion laser with broadened functional capabilities. KVEKA, no. 5, 1986, 1004-1009.
84. Bunkin, F.V.; Derzhiiyev, V.I.; Mesyats, G.A.; Murav'yev, I.I.; Skakun, V.S.; Tarasenko, V.F.; Fedenev, A.V.; Yakovlenko, S.I.; Yancharina, A.M. (IOF; ISE). Penning plasma lasers using neon transitions. IANFA, no. 6, 1986, 1064-1074.
85. Butkevich, V.I.; Privalov, V.Ye.; Skvortsova, G.V. (). Fluctuations of argon ion laser radiation. ZPSBA, v. 44, no. 5, 1986, 747-753.
86. Ivanov, V.A.; Skoblo, Yu.E. (LGU). Kinetics of the plasma decay of diffuse and contracted discharges in xenon. FIPLD, no. 6, 1986, 708-713.
- e. Nitrogen
87. Khait, O.V. (LGU). Optimizing the structural elements of a nitrogen laser used as a pump source for a dye laser. VINITI. Deposit, no. 1494-V, 5 Mar 1986, 7 p. (RZFZA, 86/6L596).

- f. Iodine
 - g. Hydrogen
 - h. Ammonia
 - i. Carbon Tetrafluoride
 - j. Nitrous Oxide
 - k. Water Vapor
 - l. Heavy-Water Vapor
 - m. Submillimeter
88. Kubarev, V.V. (IYaFSOAN). Optimized HCN laser. PRTEA, no. 3, 1986, 177-179.
- n. Metal vapor
89. Blagoyev, K.B.; Kas'yanenko, S.V.; Krauze, U.; Tolmachev, Yu.A. (). Inelastic collisions of excited helium and normal rubidium atoms. OPSPA, vol. 60, no. 5, 1986, 896-903.
90. Isayev, A.A.; Lemmerman, G.Yu; Pettrash, G.G. (FIAN). Thermal conditions and characteristics of the stimulated emission from a self-heated copper-vapor laser. KVEKA, no. 5, 1986, 1034-1037.
91. Tretyak, V.P.; Voronyuk, L.V.; Glushchenko, O.A.; Popov, A.V. (KGU). Solution to the problem of optimal control of the performance of metal vapor lasers. KGУ. Vestnik. Modelirovaniye i optimizatsiya slozhenykh sistem, no. 5, 1986, 19-23. (RZFZA, 86/6L895).
92. Yelayev, V.F.; Mirza, S.M.; Sukhanov, V.B.; Troitskiy, V.O.; Soldatov, A.N.; Filonov, A.G. (SKBOptika). Effect of background radiation from an unstable-resonator copper-vapor laser on stimulated emission from dyes. KVEKA, no. 5, 1986, 914-917.
- o. Gasdynamic
93. Biryukov, A.S.; Serikov, R.I.; Starik, A.M.; Shcheglov, V.A. (FIAN). Three-frequency CO₂ gasdynamic laser with optical feedback. FIAN. Preprint, no. 102, 1985, 16 p. (RZFZA, 86/6L922).

94. Vigasin, A.A.; Losev, S.A.; Makarov, V.N. (IMMGU). Inverse population of electronic states in alkali metals in mixtures with molecular gasses upon cooling in a supersonic nozzle. KVEKA, no. 6, 1986, 1185-1194.

4. Excimer

95. Bibinov, N.K.; Vinogradov, I.P.; Mikheyev, L.D; Stavrovskiy, D.B. (NIIFL). Formation and destruction of KrF excimer molecules during KrF_(sub2) photolysis. KHFID, no. 5, 1986, 615-619.
96. Dem'yanov, A.V.; Yegorov, V.S.; Kochetov, I.V.; Napartovich, A.P.; Pastor, A.A.; Penkin, N.P.; Serdobintsev, P.Yu.; Shubin, N.I. (IAE). Dynamics of populations of electronic states of atoms and ions in a self-sustained discharge in a HCl-Xe-He mixture. KVEKA, no. 6, 1986, 1250-1254.
97. Geyman, V.G.; Genkin, S.A.; Korolev, Yu.D.; Mesyats, G.A. (ISE). Self-sustaining volumetric discharge, stimulated by X-ray radiation in a He:Xe:HCl mixture under large interelectrode spacings. PZTFD, no. 11, 1986, 656-660.
98. Isakov, I.M.; Leonov, A.G.; Nevmerzhitskiy, V.I.; Novobrantsev, I.V.; Solov'yev, V.R. (MFTI). Mechanism of the disappearance of inversion in XeCl lasers, stimulated by electron beams. PZTFD, no. 11, 1986, 690-694.
99. Ishchenko, V.N.; Kochubey, S.A.; Razhev, A.M. (ITF). High-power efficient vacuum ultraviolet F_(sub2) laser excited by an electric discharge. KVEKA, no. 5, 1986, 1072-1075.
100. Khapov, Yu.I. (IAESOAN). Compact electron accelerator for the stimulation of excimer lasers. PRTEA, no. 3, 1986, 186-189.
101. Lavrik, N.L.; Nechayev, O.V. (IKhKG). Spectral-time relation of the magnetic modulation of fluorescence in polar exciplex systems. KHFID, no. 6, 1986, 786-794.
102. Yeletskiy, A.V. (). Capture-vibrational instability. ZTEFA, no. 5, 1986, 850-855.

5. Dye Vapor

103. Asimov, M.M.; Portnov, Ye.V.; Rubinov, A.N. (). Oxazine and xanthene dye vapors in a supersonic molecular jet. OPSPA, vol. 60, no. 6, 1986, 1288-1289.

D. CHEMICAL LASERS

1. Miscellaneous

2. Fluorine + Hydrogen (Deuterium)

104. Agroskiy, V.Ya.; Vasil'yev, G.K.; Gur'yev, V.I.; Tatarinov, E.Ye. (). Determination of absorption cross-sections of radiation lines of a HF-laser by CO₂, N₂O, and CH₄ molecules which compose an impurity in the air. ZPSBA, v. 44, no. 6, 1986, 953-957.
105. Bashkin, A.S.; Zolotarev, V.A.; Kulakov, L.V.; Frolov, M.P. (FIAN). Formation of short emission pulses in an atmospheric-pressure H₂-F₂ chemical laser. KVEKA, no. 5, 1986, 1065-1068.

3. Photodissociation

106. Bazhulin, S.P.; Basov, N.G.; Bugrimov, S.N.; Zuyev, V.S.; Kamrukova, A.S.; Kashnikov, G.N.; Kozlov, N.P.; Ovchinnikov, P.A.; Opekan, A.G.; Orlov, V.K.; Protasov, Yu.S. (). Blue-violet HgI/HgI₂ laser with wideband optical pumping by a linearly stabilized surface discharge. KVEKA, no. 5, 1986, 1017-1019.
107. Bazhulin, S.P.; Basov, N.G.; Bugrimov, S.N.; Zuyev, V.S.; Kamrukova, A.S.; Kashnikov, G.N.; Kozlov, N.P.; Ovchinnikov, P.A.; Opekan, A.G.; Orlov, V.K.; Protasov, Yu.S. (FIAN; MVTU). Green mercury chloride laser with wideband optical pumping. KVEKA, no. 6, 1986, 1275-1278.

4. Transfer

5. Oxygen + Iodine

108. Vagin, N.P.; Kryukov, P.G.; Pazyuk, V.S.; Yuryshev, N.N. (FIAN). Effect of water vapor on the energy of pulsed oxygen-iodine laser action. KVEKA, no. 5, 1986, 1068-1069.

6. Carbon Disulfide + Oxygen

7. Sulfur Hexafluoride + Hydrogen

E. COMPONENTS

1. Miscellaneous

2. Resonators

a. Design and Performance

109. Anan'yev, Yu.A. (). Huygens-Fresnel principle and integral equations of open resonators. OPSPA, v. 59, no. 6, 1985, 1384-1386.
110. Anan'yev, Yu.A.; Anikichev, S.G. (). Approximate method for solving integral equations of stable resonators. OPSPA, v. 59, no. 6, 1985, 1331-1336.
111. Belinskiy, A.V.; Chirkin, A.S. (MGU). Fabry-Perot resonator with phase inhomogeneities distributed over its volume. KVEKA, no. 5, 1986, 1045-1048.
112. Bunimovich, L.A. (IOAN). Stochastic dynamics of beams in resonators. IVYRA, no. 12, 1985, 1601-1602.
113. Lyubimov, V.V. (GOI). Oscillations in open resonators and directivity of laser radiation. GOI. Trudy, no. 192, 1985, 135-145. (RZFZA, 86/5L1169).
114. Poehler, M.; Wittig, R.; Henschler, D. (). Device for stabilizing the output parameters of a folded laser resonator. Patent GDR, no. 226172, 14 Aug 1985. (RZRAB, 86/6Ye475).
115. Zavgorodneva, S.I.; Koval'chuk, L.V.; Rodionov, A.Yu. (). Unstable resonator with a perforated mirror. KVEKA, no. 5, 1986, 924-931.

b. Mode Kinetics

116. Iogansen, A.A.; Pestunov, V.Yu.; Cheskis, S.G. (IKhF). Digital pulse delay unit for the control of pulsed lasers. PRTEA, no. 3, 1986, 182-185.
117. Smirnov, V.N.; Strokovskiy, G.A. (). Generation of transverse modes in a ring laser with a one-dimensional diaphragm. OPSPA, vol. 60, no. 5, 1986, 1053-1060.

3. Pump Sources

118. Andreyev, A.A.; Shlimak, I.S. (). Photoelectric phenomena in amorphous hydrogenated silicon and solar energy converters. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 222-252.
119. Andreyev, V.M.; Rumyantsev, V.D. (). Photoelectric concentrated solar energy converters based on heterostrucures. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 181-204.
120. Arutyunyan, V.M. (). Photoelectrochemical conversion of solar energy by semiconductor electrodes. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 253-287.
121. Brueckner, V.; Kerstan, F. (). Method and device for generating short optical and/or electric pulses. Patent GDR, no. 225285, 24 Jul 1985. (RZRAB, 86/6Ye522).
122. Kagan, M.B. (). Heterogeneous, cascade and combined GaAs photoconverters. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 205-221.
123. Kel'man, V.A.; Klimovskiy, I.I.; Fuchko, V.Yu.; Zapesochnyy, I.P. (KIYaI). Study on the performance of a thyratron in an excitation circuit for a copper vapor laser. KIYaI. Preprint, no. 16, 1985, 31 p. (RZRAB, 86/6Ye504).
124. Yevdokimov, V.M. (). Problems in the theory and prospects for improving the efficiency of photoconverters. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 148-180.

4. Cooling Systems

5. Deflectors

6. Attenuators

7. Collimators

8. Diffraction Gratings

125. Boltar', K.O.; Fedirko, V.A. (VNIPKTIIT). Conversion of surface electromagnetic waves by a dielectric film diffraction grating. ZTEFA, no. 5, 1986, 917-918.
126. Durasov, V.M.; Ivakin, Ye.V.; Rubanov, A.S. (IFANB). Self-diffraction and reflection of radiation under degenerate four-wave mixing in organic liquids at the wavelength of 10.6 um. KVEKA, no. 6, 1986, 1287-1289.
127. Kavtrev, A.F.; Lashkov, G.I.; Yermolayev, V.L. (). Three-dimensional phase diffraction gratings with an effective thickness of 100 um. ZPSBA, v. 43, no. 6, 1985, 996-1001.
128. Nikitin, V.A.; Malyy, A.V. (GOI). Study on the efficiency of echellettes. OPMPA, no. 8, 1985, 1-3.
129. Stankov, K. (). Distortion and broadening of Gaussian ultrashort light pulses by a diffraction grating (in English). Bolgarskiy fizicheskiy zhurnal, no. 4, 1985, 424-428. (RZFZA, 86/6L997).

9. Focusers

130. Andreyev, V.N. (). Automatic focuser. OTIZD, no. 42, 1985, 1191937. (RZRAB, 86/5Ye578).
131. Avrutskiy, I.A.; Bazakutsa, P.V.; Svakhin, A.S.; Sychugov, V.A. (MFTI). Planar focusing element. OTIZD, no. 45, 1985, 1196793. (RZRAB, 86/6Ye524).
132. Krabe, D. (). Device to vary the focus of an electromagnetic beam. Patent GDR, no. 225238, 24 Jul 1985. (RZRAB, 86/5Ye516).

10. Windows

11. Polarizers

133. Jungk, G. (). Polarizer for electromagnetic radiation. Patent GDR, no. 224684, 10 Jul 1985. (RZRAB, 86/6Ye534).

12. Beam Shapers

134. Zdobnikov, A.Ye.; Krylov, A.N.; Lysov, A.B.; Romanov, D.A. (). Designing optical systems to shape laser beams. IVZAA, no. 6, 1985, 116-118. (RZFZA, 86/5L657).

13. Lenses

135. Borodin, V.G.; Vesnin, V.N.; Vishnevskaya, L.V.; Gorokhov, A.A.; Listratova, G.V.; Lyubimov, V.V.; Mak, A.A.; Migel', V.M.; Serebryakov, V.A.; Starikov, A.D.; Filimonova, Z.K.; Chunin, B.A. (GOI). Fast lenses for concentration of radiation. OPMPA, no. 6, 1986, 5-8.

14. Filters

136. Fedak, V.V.; Mel'nichenko, T.N.; Kikineshi, A.A. (). Interference optical filters with controlled parameters. ZPSBA, v. 44, no. 6, 1986, 987-991.
137. Freyer, W. (). Light absorbing material for 1.3 um. Patent GDR, no. 224971, 17 Jul 1985. (RZRAB, 86/6Ye537).
138. Pokrovskiy, Yu.A.; Tumanova, L.A.; Khurkhulu, Yu.S. (TulPI). Tunable narrowband frequency filters in the optical range based on resonant optical antennas. VINITI. Deposit, no. 1471-V, 5 Mar 1986, 8 p. (RZFZA, 86/6L627).
139. Tslobiladze, N.A. (). Discretely tunable light filter. SAKNA, v. 119, no. 3, 1985, 497-500. (RZFZA, 86/6L628).

15. Beam Splitters

140. Zallmann, K.; Thielecke, W. (). Multichannel optoelectronic beam splitter. Patent GDR, no. 225293, 24 Jul 1985. (RZRAB, 86/5Ye298).

16. Mirrors

141. Alekseyev, V.A.; Antsiferov, V.N.; Apollonov, V.V.; Bilibin, S.V.; Gadzhiev, M.G.; Kunovich, A.P.; Narusbek, E.A.; Prokhorov, A.M.; Khomich, V.Yu. (IOF). Possibility of developing large mirrors of cellular materials. PZTFD, no. 22, 1985, 1350-1354.
142. Bauer, S.M.; Kovalev, A.M.; Petrov, M.B.; Tikhomirov, V.V.; Tovstik, P.Ye. (GOI). Numerical study on temperature deformations in optical mirrors. OPMPA, no. 9, 1985, 26-28.

143. Bol'shanin, A.F.; Putilin, E.S.; Starovoytov, S.F. (). Measuring the radiation resistance of dielectric mirrors in laser resonators. IVUBA, no. 1, 1986, 71-78. (RZRAB, 86/5Ye456).
144. Boyko, V.I.; Luk'yanchuk, B.S.; Tsarev, Ye.R. (IOF). Diffusion mechanism of damage to reflective coatings on a metal mirror. IOF. Preprint, no. 320, 1985, 27 p. (RZFZA, 86/6L644).
145. Gerasimov, V.B.; Zakharov, M.V.; Lyubimov, V.V.; Makarov, N.A.; Orlov, V.K. (). Partial self-phasing of retro-mirror elements in a resonator. KVEKA, no. 6, 1986, 1278-1281.
146. Ivanova, L.A.; Makarov, V.V.; Rudina, O.G.; Tikhomirov, G.P.; Turovskaya, T.S. (). Study on the surface morphology and properties of metal mirrors. OPMPA, no. 12, 1985, 4-6. (RZRAB, 86/5Ye486).
147. Necsoiu, T.; Florea, V.; Lancranjan, I. (). Device for mounting output mirrors for solid state lasers. Patent Romania, no. 85219, 30 Apr 1985. (RZRAB, 86/5Ye517).
148. Timus, C.; Medianu, R.; Georgescu, Cl. (). Modeling the reflectional characteristics of laser mirrors in the visible range. SCEFA, no. 10, 1985, 952-957. (RZFZA, 86/6L625).
149. Troitskiy, Yu.V. (). Dispersion and control of the combined phase value of multilayer dielectrics. OPSPA, vol. 60, no. 6, 1986, 1277-1283.

17. Detectors

150. Anilenene, Yu.K.; Bayorunas, E.K. (). Study on noise immunity in digital photodetectors. RADID, no. 2, 1985, 58-64. (RZRAB, 86/6Ye491).
151. Bezmaternykh, L.N.; Dem'yantseva, S.D.; Tabarin, V.A. (). Thermal detector of optical radiation, based on ferromagnetic resonance. IVUZB, no. 1, 1986, 98-99. (RZRAB, 86/6Ye490).
152. Dmitriyev, A.P.; Mikhaylova, M.P.; Yassiyevich, I.N. (). Shock ionization in A³B⁵ semiconductors and solid solutions based on them. Fotopriyemniki i fotopreobrazovateli. FTI. Leningrad, Nauka, 1986, 76-104.

153. Gorelenok, A.T. (). Problems in the technology of isoperiodic multicomponent A^(sup3)B^(sup5) heterostructures for photodetectors in the 1.1-1.6 μm spectral range. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 37-63.
154. Jozwikowski, K.; Orman, Z.; Rogalski, A. (). Performance of non-cooled (In, As)Sb photoelectromagnetic detectors for 10.6 μm radiation. *PSSAB*, v. A91, no. 2, 1985, 745-751. (RZFZA, 86/6L605).
155. Kolenko, Ye.A.; Orlov, V.A. (GOI). Thermoelectric cooling of radiation detectors. *OPMPA*, no. 9, 1985, 12-14.
156. Korol'kov, V.I. (). High-speed high-efficiency heterostructure photodetectors. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 6-36.
157. Naboko, V.N.; Mitev, V.; Gurdev, L.; Simeonov, V.; Grigorov, I. (). Study on the dynamic range and fast response of a photomultiplier operating in a photon counting routine (in Bulgarian). *TKMSB*, no. 3, 1985, 43-47. (RZFZA, 86/6L600).
158. Rumyantsev, K.Ye. (). Robust detector of radiation modulated by subcarrier frequency intensity. *IVUZB*, no. 1, 1986, 31-36. (RZRAB, 86/5Ye553).
159. Vul', A.Ya.; Dideykin, A.T.; Kozyrev, S.V. (). Photodetectors based on metal-dielectric-semiconductor structures. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 105-130.
160. Vul', A.Ya.; Kidalov, S.V.; Saydashev, I.I. (). Selective GaAs-GaSb photodiodes. *Fotopriyemniki i fotopreobrazovateli*. FTI. Leningrad, Nauka, 1986, 64-75.

18. Modulators

161. Akmanov, A.G.; Smirnov, I.A.; Yamaletdinov, A.G. (BashGU). Shaper of high voltage modulating compound pulses for control of a laser. *PRTEA*, no. 3, 1986, 127-129.
162. Arkhipov, R.N.; Yevstigneyev, V.L.; Zharikov, Ye.V.; Pshenichnikov, S.M.; Shcherbakov, I.A.; Yumashev, V.Ye. (IOF). Optimization of the outcoupling of stored energy during a Q-switching operation for GSGG-Cr, Nd laser rods. *KVEKA*, no. 5, 1986, 1048-1050.

163. Bakinovskiy, K.N.; Ray, G.I.; Shakin, O.V.; Sharonov, G.V. (NIIPFP). Multi-purpose device for the obtaining and control of mode-locking in continuous lasers. PRTEA, no. 3, 1986, 246.
164. Bakinovskiy, K.N.; Ray, G.I.; Shakin, O.V.; Sharonov, G.V. (NIIPFP). Q-factor modulation control device of an optical resonator. PRTEA, no. 3, 1986, 247.
165. Basyayeva, L.I.; Vladimirov, F.L.; Morichev, I.Ye.; Pletneva, N.I. (GOI). Space-time modulator of light based on a photosemiconductor-liquid crystal structure. GOI. Trudy, no. 192, 1985, 39-43. (RZFZA, 86/5L830).
166. Brueckner, V.; Kerstan, F. (). Fast response time measurements in transistors using picosecond optoelectronic switches (in English). PSSAB, v. A91, no. 2, 1985, K179-K183. (RZFZA, 86/6Zh699).
167. Bryksin, V.V.; Korovin, L.I. (FTI). Rotation of the polarization vector in spatial modulators of light using the Pockels effect. ZTEFA, no. 12, 1985, 2289-2296.
168. Chigrinov, V.G.; Belyayev, V.V.; Vasil'yev, A.A. (FIAN). Orientational effects in nematic liquid crystals in electric and magnetic fields. Optical characteristics. Use in space-time light modulators. FIAN. Preprint, no. 25, 1986, 58 p. (RZFZA, 86/6L678).
169. Danilov, V.V.; Savel'yev, D.A. (). Modulation of CO₂ laser radiation by a liquid crystal modulator. ZTEFA, no. 6, 1986, 1239-1241.
170. Konobeyev, V.M.; Zagorskiy, Ya.T.; Kuznetsov, A.A.; Levi, A.M.; Ulanovskiy, M.V. (). Optical switch with controlled time of exposure. IZTEA, no. 6, 1986, 41-43.
171. Kovalev, A.A.; Nekrasov, G.L.; Serak, S.V.; Martynovich, A.A. (). Thermooptical modulation of laser radiation reflected by a thin layer of a nematic liquid crystal. ZPSBA, v. 44, no. 5, 1986, 741-747.
172. Ostroumenko, A.P.; Prud'ko, P.; Shmal'ko, A.V. (DGU). Optical phase modulator. OTIZD, no. 42, 1985, 1191994. (RZRAB, 86/6' 212).

173. Vasil'yev, A.A.; Gruzevich, Yu.K.; Levov, S.N.; Parfenov, A.V.; Chigrinov, V.G. (FIAN). Resolving power of liquid-crystal space-time radiation modulators. Mathematical modeling and experimental results. FIAN. Preprint, no. 1, 1986, 55 p. (RZFZA, 86/6L677).
174. Vaytekunas, F.K.; Kurshyalis, S.K. (). Synchronous modulation of semiconductor lasers by sinusoidal current and light. IVUZB, no. 12, 1985, 66-68. (RZRAB, 86/6Ye203).
175. Westphal, K.D.; Westphal, U.; Spickermann, G.; Schulz, P. (). Switching device in a laser module. Patent GDR, no. 225551, 31 Jul 1985. (RZRAB, 86/6Ye523).

F. NONLINEAR OPTICS

1. General Theory

176. Akhmanov, S.A. (MGU). Nonlinear optics at Moscow University. IANFA, no. 6, 1986, 1050-1063.
177. Alekseyev, A.V.; Sushilov, N.V. (TOI). Persistent nutation in a two-level system. ZETFA. v. 89, no. 6, 1985, 1951-1956.
178. Arakelyan, S.M.; Chilingaryan, Yu.S. (YeGU). Optical bistability in liquid crystals: surface phenomena, distributed feedback systems, nonlinear scattering and nonlinear Fabry-Perot resonators. IANFA, no. 6, 1986, 1123-1133.
179. Arakelyan, S.M.; Karn, A.; Ong, Kh.L.; Shen, I.R. (YeGU). Internal optical bistability in photoinduced structural phase transitions in nematic liquid crystals. IANFA, no. 6, 1986, 1182-1186.
180. Auzin'sh, M.P.; Suvorov, A.Ye.; Ferber, R.S. (). Description of nonlinear beat resonance in diatomic molecules in a dipole oscillator model. LZFTA, no. 6, 1985, 49-52. (RZFZA, 86/5L1023).
181. Averbukh, I.Sh.; Kovarskiy, V.A.; Perel'man, N.F. (). Optical bistability based on multiphoton resonance processes. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPPANM. Kishinev, Shtiintsa, 1986, 3-40.
182. Bajer, J.; Perina, J. (). Photon statistics of degenerate four-wave mixing with classical and quantum pumping (in English). CZYPA, v. B35, no. 10, 1985, 1146-1162. (RZFZA, 86/6L837).

183. Bardetskiy, P.I.; Shmiglyuk, M.I.; Tiron, Sh.D. (). Nonlinear optical nutation at interexciton transitions in Cu₂O. PSSBB. v. B131, no. 1, 1985, 235-241. (RZFZA, 86/5L999).
184. Belov, A.L.; Kraynov, V.P. (). Excitation of atoms by short light pulses during optical collision. OPSPA, v. 60, no. 1, 1986, 18-19.
185. Bogolyubov, N.N.; Fam Le Kien; Shumovskiy, A.S. (OIYaI). Collapse and recovery of nonlinear Rabi oscillations in a model of a three-level atom. DANKA, vol. 288, no. 3, 1986, 590-592.
186. Bogolyubov, N.N.; Fam Le Kien; Shumovskiy, A.S. (). Dynamics of two-photon processes in three-level systems. Problemy sovremennoy statisticheskoy fiziki. ITeFUk. Kiyev, 1985, 43-50. (RZFZA, 86/6L828).
187. Brazovskiy, V.Ye. (). Optical nonlinearity of a two-level medium. OPSPA, vol. 60, no. 5, 1986, 1067-1069.
188. Bukhenskiy, M.F.; Kanayev, A.V.; Lipatov, N.I. (). Final plenary session of the scientific council of the USSR Academy of Sciences on the problem of coherent and nonlinear optics (Tbilisi, May 27-29, 1985). KVEKA, no. 5, 1986, 1076-1085.
189. Cao Long Van (). Dicke model in a coherent state representation (in English). ATPLB. v. A68, no. 4, 1985, 647-665. (RZFZA, 86/5L992).
190. German, S.I.; Chaykovskiy, I.A.; Shmelev, G.M. (). Conductivity of strongly inhomogeneous semiconductors in an alternating electric field. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 71-78.
191. Germey, K.; Herger, R.L.; Herklotz, R.; Mareyen, M.; Schuette, F.J.; Tiebel, R.; Worlitzer, K. (). Effect of noise on a dispersive optical bistable system with trilinear interaction (in English). ANPYA, no. 1, 1985, 13-24. (RZFZA, 86/5L1011).
192. Golovchenko, Ye.A.; Dianov, Ye.M.; Prokhorov, A.M.; Serkin, V.N. (IOF). Self-action of femtosecond optical wave packets. DANKA, vol. 288, no. 4, 1986, 851-856.

193. Kovarskiy, V.A.; Sinyavskiy, E.P.; Chebotar', V.N.; Chernysh, L.V. (). Quantum transitions in systems with inverse hydrogen-like series. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 40-63.
194. Krest'yaninov, A.S.; Mityugov, V.V. (). Optical measurement of continuous quantities. RAELA, no. 5, 1986, 891-897.
195. Lomtev, A.I.; Bol'shinskiy, L.G. (). Nonlinear surface polaritons on a superlattice. UFIZA, no. 1, 1986, 34-37. (RZFZA, 86/6L1124).
196. Mazurenko, Yu.T. (). Determination of resonance Raman scattering by the coherence function. OPSPA, v. 60, no. 1, 1986, 194-196.
197. Mukhtarov, Ch.K. (IOF). Electron energy in a strong light field. IOF. Preprint, no. 21, 1986, 13 p. (RZFZA, 86/6L857).
198. Novikov, V.D.; Pestov, E.G. (). Sixth International School on Coherent Optics, Ustorn, Poland, 19-26 Sep 1985. KVEKA, no. 6, 1986, 1306-1310.
199. Perlin, Ye.Yu.; Fedorov, A.V. (). Multiphoton absorption in semiconductors in the submillimeter range. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 92-104.
200. Petrov, N.S.; Shakin, V.A. (). Phase hysteresis under total reflection of light from a transparent layer with a nonlinear second boundary. ZPSBA, v. 44, no. 1, 1986, 159-162.
201. Rozanov, N.N. (GOI). Optical bistability: current status and prospects. GOI. Trudy, no. 193, 1985, 1-28. (RZRAB, 86/6Ye2).
202. Starkov, A.V. (VTSSOAN). Problems in the nonlinear theory of optimization of statistical modeling of radiation transfer in a layer of matter with anisotropic scattering. VTSSOAN. Preprint, no. 597, 1985, 14 p. (RZFZA, 86/5L988).
203. Vlasov, R.A.; Gadomskiy, O.N.; Gadomskaya, I.V.; Samartlev, V.V. (IFANB; YelGPI; KazFTI). Nonlinear reflection and refraction of ultrashort light pulses at the surfaces of resonant media and the effects of phase memory. ZETFA, vol. 90, no. 6, 1986, 1938-1951.

204. Yevseyev, I.V.; Yermachenko, V.M.; Tsikunov, V.N. (). Measuring the relaxation times of resonant levels of molecules by stimulated photon echo. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 266-270.
205. Zabolotskiy, A.A. (IAESOAN). Cooperative Raman scattering in extended media. IAESOAN. Preprint, no. 307, 1986, 12 p. (RZFZA, 86/6L825).
206. Zege, E.P.; Gribov, L.A.; Perelygin, I.S. (). Optical transmission function of a highly scattered layer. ZPSBA, v. 44, no. 5, 1986, 854-860.
207. Zenchenko, V.P. (). Multiphonon band-band recombination in narrowband semiconductors. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 79-83.
208. Zheludev, N.I.; Karasev, V.Yu.; Kostov, Z.M.; Nunuparov, M.S. (MGU). Giant exciton resonance in nonlinear optical activity. ZFPRA, vol. 43, no. 12, 1986, 578-581.
209. Zhidkov, A.G.; Yakovlenko, S.I. (IOF). Theory on absorption of intense resonance radiation during collisions between atoms and structureless particles. Methodological supplement. IOF. Preprint, no. 247, 1985, 22 p. (RZFZA, 86/5L1018).
210. Zolot'ko, A.S.; Kitayeva, V.F.; Sobolev, N.N.; Fedorovich, V.Yu.; Shtykov, N.M. (FIAN). Photoinduced periodic grating in a cholesteric liquid crystal. ZFPRA, vol. 43, no. 10, 1986, 477-479.

2. Frequency Conversion

211. Achilles, D.; Lauth, H.; Fehlau, G. (). Layered device for surface antireflection coating of optical elements for frequency doubling. Patent GDR, no. 226395, 21 Aug 1985. (RZRAB, 86/5Ye487).
212. Aleksandrov, K.S.; Aleksandrovskiy, A.S.; Karpov, S.V.; Lukinykh, V.F.; Myslivets, S.A.; Popov, A.K.; Slabko, V.V. (IFSOAN). Frequency mixing and generation of tunable vacuum UV radiation in naphthalene vapor. IFSOAN. Preprint, no. 362F, 1985, 13 p. (RZFZA, 86/6L1081).

213. Apanasevich, P.A.; Zaporozhchenko, V.A.; Zaporozhchenko, R.G.; Kachinskiy, A.V.; Mukha, V.A.; Pilipovich, I.V.; Chekhlov, O.V. (IFANB). Laws governing intracavity second harmonic generation. KVEKA, no. 6, 1986, 1132-1137.
214. Apanasevich, P.A.; Zaporozhchenko, V.A.; Kachinskiy, A.V.; Pilipovich, I.V.; Chekhlov, O.V. (IFANB). Correlation measurements of phase modulation in intracavity frequency doubling of ultrashort pulses. IANFA, no. 6, 1986, 1155-1157.
215. Belinskiy, A.V.; Tagiyev, Z.A.; Chirkin, I.S. (MGU). Nonlinear conversion of optical frequencies in a randomly inhomogeneous resonator. KVEKA, no. 5, 1986, 1050-1053.
216. Butylkin, V.S.; Yenikeyev, R.Sh.; Fisher, P.S.; Khabarov, V.V. (IRE). Efficient stimulated emission of the first Stokes component by stimulated Raman scattering in a selective optical delay line. KVEKA, no. 5, 1986, 1053-1055.
217. Kazak, N.S.; Miklavskaya, Ye.M.; Sergiyenko, M.I. (). Second harmonic generation of laser emission under the noncollinear interaction of ultrasonic diffracted light waves. ZPSBA, v. 44, no. 5, 1986, 761-769.
218. Mironov, G.V.; Popov, A.K.; Slabko, V.V. (IFSOAN). Compensation of inhomogeneous nonlinear phase mismatch by frequency mixing in gaseous media. KVEKA, no. 6, 1986, 1138-1144.
219. Popov, A.K. (). Nonlinear conversion of light in gases. Applications in spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 1. Tomsk, 1986, 96-119.
220. Sartakov, B.G. (IOF). Third harmonic generation from resonant interaction of radiation and molecules. IOF. Preprint, no. 295, 1985, 21 p. (RZFZA, 86/5L1213).
221. Shangin, V.A.; Yankeleva, I.I. (). Measurement of the nonlinearity of receivers of optical radiation by a light summing method. IZTEA, no. 6, 1986, 34-35.
222. Stramska, H. (). Magnetooptic effects on third harmonic generation in semiconductors. PSSBB, v. B131, no. 1, 1985, K77-K79. (RZFZA, 86/5L1214).
223. Volosov, V.D. (GOI). Wide-angle nonlinear converters of laser frequency. GOI. Trudy, no. 192, 1985, 145-154. (RZFZA, 86/6L1077).

3. Parametric Processes

224. Antipov, V.B. (). Transmission characteristics and stability of a parametric frequency converter. RAE LA, no. 5, 1986, 935-937.
225. Bolotskikh, L.T.; Popkov, V.G.; Popov, A.K.; Shalayev, V.M. (IFSOAN). Degenerate multiphoton parametric scattering of infrared radiation at vibration-rotational molecular transitions. KVEKA, no. 5, 1986, 942-949.
226. Draganov, A.B.; Kalmykov, A.M. (). Parametric frequency upconversion of electromagnetic waves in a relativistic electron flow in a magnetized plasma. UFIZA, no. 12, 1985, 1799-1802. (RZRAB, 86/5Yel66).
227. Kryuchkov, G.Yu. (IFI). Correlation of photons in parametric wave mixing. IFI. Preprint, no. 13, 1985, 20 p. (RZFZA, 86/5L1007).
228. Shalayev, V.M.; Yakhnin, V.Z. (). Parametric resonance in molecules with electrooptical anharmonism. OPSPA, vol. 60, no. 5, 1986, 943-947.

4. Stimulated Scattering

- a. Miscellaneous Scattering
- b. Raman

229. Arutyunyan, G.V.; Dzhotyan, G.P.; Minasyan, L.L. (NIIFL). Theory of stimulated Raman scattering by anharmonic vibrations in a medium. VINITI. Deposit, no. 8938-V, 26 Dec 1985, 123-129. (RZFZA, 86/6L1097).
230. Bunkin, A.F.; Galumyan, A.S.; Zhumanov, Kh.A.; Mal'tsev, D.V.; Surskiy, K.O. (). Resolution of acetone and benzene Ramam-scattering wide-band structures in the 3000 cm^{-1} range by polarization coherent anti-Stokes light scattering. OPSPA, v. 60, no. 5, 1986, 960-963.
231. Dmitriyev, V.G.; Konvisar, P.G.; Mikhaylov, V.Yu. (). Quasi-continuous wave high-power optical Raman lithium iodate laser. KVEKA, no. 5, 1986, 1063-1065.
232. Galazka, R. (). Tunable semiconductor Raman laser. Patent Poland, no. 126039, 31 Oct 1985. (RZRAB, 86/6Yel95).

233. Korniyenko, N.Ye.; Malyy, V.I.; Ponezha, G.V.; Ponezha, Ye.A. (). Anti-Stokes Raman scattering on polaritons in liquids. OPSPA, vol. 60, no. 6, 1986, 1171-1174.
234. Kravtsov, N.V.; Naumkin, N.I. (NIIYaF). Intracavity Raman radiation in compressed oxygen. KVEKA, no. 6, 1986, 1300-1301.
235. Mailyan, A.E.; Nersisyan, G.Ts.; Papanyan, V.O. (IFI). Raman scattering of laser emission into the far ultraviolet spectral region by helium and neon excited states. KVEKA, no. 5, 1986, 1025-1026.
- c. Brillouin
236. Adkhamov, A.A. (). Stimulated Brillouin scattering of a two-mode pumping wave in a plasma flow. VINITI. Deposit, no. 1293-V, 25 Feb 1986, 9 p. (RZFZA, 86/6L1110).
237. Chrvatova, Z. (). Use of Brillouin scattering in optoelectronics (in English). OPAPB, no. 2, 1985, 143-147. (RZRAB, 86/6Ye302).
238. Gayzhauskas, E.; Krushas, V.; Nedbayev, N.Ya.; Petrenko, R.A.; Piskarskas, A.; Smil'gyavichyus, V. (VilGU). Stimulated emission of picosecond pulses under stimulated Brillouin scattering in liquids. KVEKA, no. 6, 1986, 1297-1299.
239. Keldysh, L.V.; Tikhodeyev, S.G. (FIAN). Intense polariton waves near the stimulated scattering threshold. FIAN. Preprint, no. 331, 1985, 53 p. (RZFZA, 86/6L1104).
240. Keldysh, L.V.; Tikhodeyev, S.G. (FIAN). High intensity polariton wave near the stimulated scattering threshold. ZETFA, vol. 90, no. 5, 1986, 1852-1870.
- d. Rayleigh
241. Antipov, O.L.; Bespalov, V.I.; Pasmanik, G.A. (IPF). Pump-coupled generation of beams under stimulated scattering of opposed light waves. ZETFA, vol. 90, no. 5, 1986, 1577-1587.
242. Garova, Ye.A.; Kozlov, A.I.; Plesskiy, V.P (IRE). Theory of the photothermic generation of Rayleigh waves. AKZHA, no. 3, 1986, 310-316.

5. Self-focusing

243. Gorbunov, L.M. (). Transient self-focusing of light in a laser plasma. Problemy nelineynykh i turbulentnykh protsessov v fizike. Mezhdunarodnaya rabochaya gruppa, 2nd, Kiyev, 1983. Trudy. Part 1. Kiyev, Naukova dumka, 1985, 297-302. (RZFZA, 86/6G65).
244. Rubenchik, A.M.; Turitsyn, S.K. (IAESOAN). Self-focusing of light in a laser plasma. IAESOAN. Preprint, no. 295, 1985, 19 p. (RZFZA, 86/6L1132).

6. Acoustic Interaction

245. Asnis, L.N.; Ignatov, A.B.; Moskalenko, A.V.; Remizov, S.A. (GOI). Acoustooptic devices for ranging systems and information processing systems. GOI. Trudy, no. 192, 1985, 282-316. (RZFZA, 86/6A216).
246. Belova, G.N.; Remizova, Ye.I. (AKIN). acoustooptic effect in an unoriented layer of a nematic liquid crystal under periodic shear deformation. KRISA, no. 3, 1986, 517-521.
247. Bulygin, A.S.; Kulakov, A.S. (LETI). Diffraction of light by an ultrasonic wave in an isotropic crystal applicable to an acoustooptic modulator. LETI. Izvestiya, no. 351, 1985, 105-109. (RZFZA, 86/5P184).
248. Chaykovskiy, I.A.; Popov, Ye.A. (). Photoabsorption of ultrasound in inhomogeneous semiconductors. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 63-71.
249. Dmitriyev, A.L. (). Optoacoustic effect in a mercury cylindrical resonator. ZTEFA, no. 5, 1986, 921-923.
250. Gusev, V.E. (MGU). Synchronous interaction of nonlinear acoustic waves with thermal impulses. AKZHA, no. 3, 1986, 322-328.
251. Gusev, V.E.; Karabutov, A.A. (MGU). Theory of Rayleigh-wave excitation due to optical-pulse absorption in semiconductors. FTPPA, no. 6, 1986, 1070-1075.
252. Kitayeva, V.F.; Zharikov, Ye.V.; Chistyy, I.L. (). Properties of crystals with a garnet structure. PSSAB, v. A92, no. 2, 1985, 475-488. (RZFZA, 86/6Ye14).

253. Kludzin, V.V.; Preslenev, L.N.; Masyutin, A.A. (). Treatment of optical distributions by means of an acoustooptical delay line. OPSPA, vol. 60, no. 5, 1986, 1018-1022.
254. Lazarev, M.V.; Lemanov, V.V.; Sukharev, B.V. (FTI). Optical recording of a surface acoustic wave in lithium niobate. PZTFD, no. 12, 1986, 760-764.
255. Mazurkiewicz, H. (). Visualization of acoustic pulses in a modified Toepler system. ARAKB, no. 4, 1984, 347-356. (RZFZA, 86/5P72).
256. Preslenev, L.N.; Stashkevich, A.A. (). Nonlinear distortions in acoustooptic devices with optical heterodyning. IVUZB, no. 1, 1986, 64-68. (RZRAB, 86/5Ye24).
257. Pushkina, N.I. (MGU). Surface nonlinear acoustic interactions in liquids. DANKA, vol. 288, no. 1, 1986, 107-110.
258. Sukhorukov, A.P.; Timofeyev, V.V.; Trofimov, V.A. (MGU). Passing of a light beam through a thin layer with nonlinear and accidental phase distortions. Investigation of the possibility of compensation. IVYRA, no. 6, 1986, 667-674.

G. SPECTROSCOPY OF LASER MATERIALS

259. Aminov, L.K.; Kaminskiy, A.A.; Malkin, B.Z. (). Anisotropy of radiation intensity from activator ions in crystals. Fizika i spektroskopiya lazernykh kristallov. IKAN. Nauka, 1986, 84-112.
260. Bagdasarov, Kh.S.; Krasilov, Yu.I.; Shestakov, A.V.; Bakin, D.V.; Kevorkov, L.M.; Dorozhin, L.M.; Kuratov, I.I.; Siyuchenko, O.G.; Potemkin, A.V. (). Spectroscopic properties of Ti³⁺ ions in aluminates. VINITI. Deposit, no. 1378-V86. (ZPSBA, v. 44, no. 5, 1986, 869).
261. Eydzhunas, G.S.; Kavalyauskas, Yu.F.; Shileyka, A.Yu (IFPV). Photoreflection of implanted B+ in Cd_{0.27}Hg_{0.73}Te crystals in an edge-absorption range. FTPPA, no. 5, 1986, 789-793.
262. Kaminskiy, A.A.; Korniyenko, A.A. (). Parametrization of 4f-4f transitions, allowing for virtual processes of charge transfer. Fizika i spektroskopiya lazernykh kristallov. IKAN. Nauka, 1986, 112-124.

263. Levshin, L.V.; Struganova, I.A.; Toleutayev, B.N. (). Effect of relaxation processes on time and polarization fluorescence characteristics of rhodamine 6G in glycerine. ZPSBA, v. 44, no. 5, 1986, 769-776.
264. Mirzakhanyan, A.A.; Petrosyan, A.K. (IFI). Electron paramagnetic resonance and optical absorption for Co²⁺ impurity ions in alpha-LiIO₃ and LiNbO₃ monocrystals. FTVTA, no. 5, 1986, 1593-1595.
265. Prischepov, A.S.; Nizamov, N. (IFANB). Photoinduced optical anisotropy of polymer films containing rhodamine 6G and its base. KHFID, no. 5, 1986, 635-642.
266. Raczyński, A. (). Continued fraction approach to collision-induced absorption for He+Xe (in English). ATPLB, v. A68, no. 4, 1985, 667-674. (RZFZA, 86/5D269).
267. Starostin, N.V. (). New aspects in the theory of crystal fields applicable to rare-earth activators. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 62-84.
268. Tkachuk, A.M.; Klokishner, S.I.; Poletimova, A.V.; Mogileva, L.M.; Petrov, M.V.; Podkolzina, I.G.; Semenova, T.S. (). Probability of intracenter transitions and self-quenching of luminescence in SrFe₂-2ErF₃ and SrF₂-2HoF₃ systems. OPSPA, v. 59, no. 6, 1985, 1239-1245.
269. Vas'ko, F.T. (IPANUk). Quasi-energy spectrum and anisotropic photoconduction of holes. FTPPA, no. 5, 1986, 976-970.
- H. ULTRASHORT PULSE GENERATION
270. Avanesyan, S.M.; Gusev, V.E. (MGU). Excitation of ultrashort deformation pulses upon absorption of optical radiation in semiconductors. KVEKA, no. 6, 1986, 1241-1249.
271. Bezrodnyy, V.I.; Tikhonov, Ye.A.; Nedbayev, N.Ya. (IFANUk). Stimulated emission of duration-controlled ultrashort pulses from a passively mode-locked YAG:Nd³⁺ laser. KVEKA, no. 6, 1986, 1214-1219.
272. Dianov, Ye.M.; Karasik, A.Ya.; Prokhorov, A.M.; Serkin, V.N. (IOF). Ultrashort pulses in fiber lightguides. IANFA, no. 6, 1986, 1042-1049.

273. Kocharovskaya, O.A.; Khanin, Ya.I. (IPF). Population trapping and coherent bleaching by a recurring ultrashort pulse train in a three-level medium. ZETFA, vol. 90, no. 5, 1986, 1610-1618.
274. Onishchukov, G.I.; Stel'makh, M.F.; Fomichev, A.A. (MFTI). Picosecond radiation sources using c-w pumped garnet lasers. IANFA, no. 6, 1986, 1117-1122.
275. Piskarskas, A.; Smil'gyavichyus, V.; Umbrasas, A.; Yuodishyus, I. (VilGU). Parametric oscillation of picosecond light pulses in a LiNbO₃ crystal at a repetition rate of up to 10 kHz. KVEKA, r. 6, 1986, 1281-1284.
276. Varnavskiy, O.P.; Golovlev, V.V.; Kirkin, A.N.; Malikov, R.F.; Mozharovskiy, A.M.; Benedikt, M.G.; Trifonov, Ye.D. (FIAN). Coherent propagation of small area pulses in activated crystals. ZETFA, vol. 90, no. 5, 1986, 1596-1609.
277. Vasilyauskas, V.; Piskarskas, A.; Sirutkaytis, V.; Stabinis, A.; Yankauskas, A. (VilGU). Generation of high-power femtosecond light pulses in media with square-law nonlinearity. IANFA, no. 6, 1986, 1075-1086.
278. Vysloukh, V.A.; Dovchenko, D.N.; Zheludev, N.I.; Kuznetsov, V.I.; Muradyan, L.Kh.; Simonov, A.V. (MGU). Subpicosecond pulse shaping with a high frequency repetition rate in a fiberoptic compressor. IANFA, no. 6, 1986, 1220-1224.
279. Vysloukh, V.A.; Matveyeva, T.A. (MGU). Two-stage pulse compression in the near infrared region. KVEKA, no. 5, 1986, 1020-1021.
280. Zaporozhchenko, V.A.; Kachinskiy, A.V.; Rakush, V.V.; Stavrov, A.A.; Tylets, N.A. (IFANB). Emission of short light pulses by a laser with a short variable cavity Q-factor. PRTEA, no. 3, 1986, 180-182.

J. CRYSTAL GROWING

K. THEORETICAL ASPECTS OF ADVANCED LASERS

281. Bessonov, Ye.G. (FIAN). Effect of quantum fluctuations in synchrotron radiation on particle dynamics in high-energy microtrons. FIAN. Preprint, no. 340, 1985, 8 p. (RZFZA, 86/6V441).
282. Ginzburg, N.S. (IPF). Nonlinear theory of a relativistic cyclotron resonance maser with resonance electrodynamical systems. IVYRA, no. 6, 1986, 728-739.
283. Kokhman'ski, S.; Kulish, V. (). Nonlinear theory of free electron lasers with multifrequency pumping (in Russian). ATPLB, v. A68, no. 5, 1985, 741-748. (RZFZA, 86/6L873).
284. Kokhman'ski, S.; Kulish, V. (). Nonlinear theory of free electron lasers (in Russian). ATPLB, v. A68, no. 5, 1985, 749-753. (RZFZA, 86/6L874).
285. Lebedev, A.N.; Martirosyan, G.V.; Sharafyan, V.R. (FIAN). Radiation acceptance of an undulator. ZTEFA, no. 6, 1986, 1130-1136.
286. Lukin, K.A.; Shestopalov, V.P. (). Theory of nonlinear phenomena in diffraction radiation oscillators, that is, free electron lasers. Problemy nelineynykh i turbulent nykh protsessov v fizike. Mezhdunarodnaya rabochaya gruppa, 2nd, Kiyev, 1983. Trudy. Part 1. Kiyev, Naukova dumka, 1985, 369-373. (RZFZA, 86/6L866).
287. Varfolomeyev, A.A.; Pitalev, M.M. (IAE). Stimulated magnetic bremsstrahlung of electrons in fields of an undulator and a driving axial field. ZTEFA, no. 5, 1986, 856-867.
288. Zal'mezh, V.F.; Nikitin, M.M.; Epp, V.Ya. (). Obtaining an arbitrary polarization mode of undulator radiation. VINITI. no. 191-V, 8 Jan 1986, 13 p. (RZFZA, 86/5V655).
289. Zal'mezh, V.F.; Nikitin, M.M.; Epp, V.Ya. (). Effect of the number of rotations of an electron beam in a synchrotron on the spectrum of undulator radiation. IVUFA, no. 9, 1985, 107-109. (RZFZA, 86/5V610).

L. GENERAL LASER THEORY

290. Antipenko, B.M.; Voronin, S.P.; Mayboroda, V.F.; Privalova, T.A. (). Influence of excitation summing on the efficiency of laser action in sensitized materials. KVEKA, no. 5, 1986, 980-988.
291. Arkhipova, Z.L.; Mit'kin, V.M.; Reshetnikov, V.I. (GOI). Dynamics of mutual compensation of initial and thermally induced optical inhomogeneities in an active element. OPMPA, no. 11, 1985, 56-58.
292. Bonch-Bruyevich, A.M. (biographical subject) (GOI). Aleksey Mikhaylovich Bonch-Bruyevich on his seventieth birthday. OPMPA, no. 5, 1986, 61-62.
293. Bonch-Bruyevich, A.M. (biographical subject) (). Aleksey Mikhaylovich Bonch-Bruyevich on his seventieth birthday. OPSPA, vol. 60, no. 6, 1986, 1299-1300.
294. Borisov, Ye.N.; Penkin, N.P.; Red'ko, T.P. (LGU). $5(sup3)P(subj)$ transitions among components of thin structures of an atom of strontium during collisions with argon atoms. KHFID, no. 5, 1986, 605-608.
295. Brunner, W. (Brunner, V.); Fischer, R. (Fisher, R.); Paul, H. (Paul', Kh.) (all from GDR). (). Spectral and dynamic characteristics of multimode lasers. IANFA, no. 6, 1986, 1172-1175.
296. Bulyshev, A.Ye.; Kurbatov, A.A.; Preobrazhenskiy, N.G.; Suvorov, A.Ye. (ITPM). Statistical modeling of radiation capture in multilevel systems. ITPM. Preprint, no. 39, 1985, 34 p. (RZFZA, 86/6L822).
297. Csillag, L.; Kroo, N. (). New materials in optics. MGTDA, no. 9, 1985, 676-687. (RZFZA, 86/5L774).
298. Miroshnikov, M.M.; Lebedev, A.A. (biographical subject). (GOI). Academician A.A. Lebedev (1893-1983), a prominent Soviet scientist. GOI. Trudy, no. 192, 1985, 5-24. (RZFZA, 86/6A22).
299. Moskalenko, V.A.; Dogotar', L.A. (). Development of theoretical physics in Moldavia from 1961 to 1985. IZFMB, no. 2, 1986, 3-15.
300. Nikolayev, G.N.; Rautian, S.G. (IAESOAN). Magnetooptic resonances in fluorescence induced by the "wind effect". KVEKA, no. 5, 1986, 1027-1030.

301. Pirogov, Yu.A. (MGU). Structural invariant and transient properties of multilayer interference systems. IANFA, no. 6, 1986, 1187-1190.
302. Prokhorov, A.M. (). Twenty-fifth anniversary of the laser. UFNAA, v. 148, no. 1, 1986, 3-6. (RZRAB, 86/6Yel).
303. Rebane, K.K. (biographical subject). (IFANESt). Karl Karlovich Rebane on his sixtieth birthday. ZPSBA, v. 44, no. 5, 1986, 871-872.
304. Rebane, K.K. (biographical subject) (). Karl Karlovich Rebane on his seventieth birthday. OPSPA, vol. 60, no. 6, 1986, 1300-1301.
305. Stepanov, A.I. (GOI). Solid state periodic pulsed lasers. GOI. Trudy, no. 192, 1985, 174-182. (RZFZA, 86/5L1305).
306. Trzesowski, Z. (). Waveguide lasers. EKNTB, no. 7, 1985, 3-9,1,2. (RZRAB, 86/6Ye371).
307. Zhuk, I.P. (IPFANBel). Phase transitions of elements and compounds. Part 3. INFZA, v. 50, no. 6, 1005-1007.

II. LASER APPLICATIONS

B. BIOLOGICAL EFFECTS

308. Aleksandrov, M.T.; Bezchinskaya, M.Ya.; Klimova, L.A.; Yevstigneyev, A.R.; Chavchanidze, T.O. (PMMI). Principles of low-intensity laser therapy based on the use of biophotometry. VORLA, no. 3, 1986, 54-56.
309. Avdeyev, P.S.; Bakuyev, A.A.; Berezin, Yu.D.; Volkov, V.V.; Gudakovskiy, Yu.P.; Mak, A.A.; Tovbin, B.S.; Ushkova, I.N.; Shanichev, G.Ya. (). A method of medical treatment for eye diseases. OTIZD, no. 17, 1986, 1228846.
310. Bikbayeva, A.I.; Sharipov, R.A. (BashMI). Low-energy laser radiation in comprehensive therapy of ozena patients. VORLA, no. 3, 1986, 59-61.
311. Gamaleya, N.F.; Pishko, Ye.D.; Yanish, Yu.V. (IPONk). Mechanism of laser biostimulation. Facts and hypotheses. IANFA, no. 5, 1986, 1027-1032.
312. Gayduk, M.I.; Grigor'yants, V.V.; Mironov, A.F.; Roytman, L.D.; Rumyantseva, V.D. (). Spectral-luminescent investigation of pyrrole [3,2-f] indolizines by laser fiber-optic methods. ZPSBA, v. 44, no. 5, 1986, 785-790.
313. Golubenko, Yu.V.; Yevstigneyev, A.R.; Shpigel'man, S.D.; et al. (). Laser treatment of ulcers of the stomach, allowing for the optical properties of the afflicted part. SOMEA, no. 12, 1985, 34-37. (LZSTA, 26/86, 95458).
314. Kovarskiy, V.A.; Filipp, B.S. (). Development of molecular biophysics in the Academy of Sciences Moldavian SSR. IZFMB, no. 2, 1986, 20-25.
315. Machkova, N.A.; Ushkova, I.N.; Berman, A.L. (). Change in the regeneration of rhodopsin in the retina of the rabbit under low-energy laser radiation. GTPZA, no. 11, 1985, 43-44. (LZSTA, 22/86, 80386).
316. Ostrovskiy, A.V.; Pleshnov, P.G.; Fokin, V.S.; Sharov, V.A. (IBFiz). Dynamics of biopolymer structure by a kinetic spectrofluorometry method. KVEKA, no. 6, 1986, 1175-1179.
317. Priyezzhev, A.V. (MGU). Laser biophysics of cell mobility. IANFA, no. 6, 1986, 1134-1138.

318. Ryazantseva, T.A.; Kamova, N.N.; Groppa, L.; Mitrofanova, T.A. (). Determining the rheumatoid factor by laser nephelometry. Laboratornoye delo, no. 11, 1985, 700-701. (LZSTA, 23/86, 84074).
319. Timen, G.E.; Vinnichuk, P.V. (KNIIIO). Laser therapy of patients with nasal furuncle. ZUNBA, no. 3, 1986, 6-9.
320. Tupelekin, V.N. (). Using special surgical instruments in laser operations on the gastro-intestinal tract. Rannaya diagnostika i novyye metody lecheniya v klinicheskoy khirurgii (Early diagnostics and new treatment methods in clinical surgery). Cheboksary, 1985, 26-29. (LZSTA, 26/86, 95606).

B. COMMUNICATIONS SYSTEMS

321. Abdiyev, S.; Kubyshkin, V.A.; Yenikeyeva, K.Sh. (). Device for excitation of fiber lightguides. OTIZD, no. 41, 1985, 1190332. (RZRAB, 86/6Ye245).
322. Abdullayev, S.S.; Akhmadzhanov, T.; Tashpulatov, Z.T.; Khabibullayev, P.K. (IYaFANUz). Distribution of dislocations of the wavefront of a laser radiation field transmitted through a fiber-optic waveguide. KVEKA, no. 5, 1986, 1042-1044.
323. Akhmadiyev, A.G.; Belotserkovskiy, E.N.; Patlakh, A.L. (GOI). Current state and perspectives on the development of optical fiber level converters. OPMPA, no. 6, 1986, 51-56.
324. Akhmadzhanov, T.; Mirzayev, A.T. (). Effect of transverse laser modes on the time coherence of radiation passing through a fiber lightguide. IVUZB, no. 12, 1985, 50-51. (RZRAB, 86/5Ye250).
325. Andonovski, A.; Bahcevanciev, S.; Milosavlevski, Z. (). Optical anisotropy of optical fibers (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 121-128. (RZFZA, 86/5L859).
326. Andreyev, Yu.V. (). Device for adjusting optical fibers. OTIZD, no. 42, 1985, 1191860. (RZRAB, 86/6Ye305).
327. Andriyesh, A.M. (). The properties of chalcogenic glasses for optical waveguides. IZFMB, no. 2, 1986, 43-50.

328. Andriyesh, A.M.; Bol'shakov, O.V.; Kulyak, I.P.; Kulakov, Ye.V.; Ponomar', V.V.; Smirnova, A.S. (). Absorption of light in chalcogenide glass fibers. Khal'kogenidnyye poluprovodniki. Kishinev, 1985, 69-74. (RZFZA, 86/5L853).
329. Andriyesh, A.M.; Ponomar', V.V.; Smirnov, V.L.; Mironov, A.V. (IPFANM; MIFI). Chalcogenide glass in integrated and fiber optics (review article). KVEKA, no. 6, 1986, 1093-1117.
330. Bagdasarova, O.V.; Kurchinskaya, L.N. (). Fiber lightguide optical system for transferring images. IVUBA, no. 1, 1986, 82-84. (RZRAB, 86/5Ye402).
331. Baskakova, Z.A. (). Prospects for the use of lightguide communications in power engineering. Peredacha informatsii v energo-sistemakh. Moskva, 1986, 3-8. (RZRAB, 86/6Ye645).
332. Bondarev, L.A.; Budagyan, I.F.; Golovchenko, G.S.; Dubrovin, V.F.; Mirovitskiy, D.I.; Smyk, A.F. (MIREA). Method to determine the field-form factor of modes at the end-face of a circular optical waveguide. OTIZD, no. 44, 1985, 1195294. (RZRAB, 86/5Ye418).
333. Boness, R.; Tolksdorf, D. (). Numerical method to calculate the field strength in graded-index lightguides. NACHA, no. 1, 1986, 37-38. (RZRAB, 86/5Ye221).
334. Borisov, M.; Konstantinov, L.; Zartov, G.; Subotinov, N. (). Current trends in optoelectronics (in Bulgarian). SPBAA, no. 5, 1985, 17-25. (RZFZA, 86/6L647).
335. Braun, J.; Kostka, F.; Pechlat, M.; Kuncova, G. (). Microcomputer control of a device for drawing out optical fibers. SLOZA, no. 1, 1986, 23-27. (RZRAB, 86/6Ye467).
336. Brehm, P. (). Information transmission over lightguide cables. Elektronkabel, no. 1, 1985, 13-16. (RZRAB, 86/6Ye425).
337. Brode, F. (). Method for reproducible measurements of multimode lightguides. Elektronkabel, no. 1, 1985, 25-29. (RZRAB, 86/6Ye363).
338. Brode, F. (). Lightguides for short-distance transmission. Elektronkabel, no. 1, 1985, 17-18. (RZRAB, 86/6Ye424).

339. Bruk, M.R.; Kravtsov, Yu.A.; Minchenko, A.I. (IOF). Temperature phase sensitivity of fiber lightguides. IANFA, no. 6, 1986, 1167-1171.
340. Brunke, W. (). Lightguide coupling technology. Elektronkabel, no. 1, 1985, 19-22. (RZRAB, 86/6Ye347).
341. Bukhinnik, A.Yu. (). Criterion for estimating the optimal parameters of lightguide communication lines in terms of energy store. Obrabotka informatsii v sistemakh svyazi. EIS. Leningrad, 1985, 54-61. (RZFZA, 86/6Zh352).
342. Bulavko, A.A.; Kovtyak, D.S.; Kolpashchikov, V.L.; Kuchinskiy, G.S.; Khramtsov, P.P. (). Automatic system for controlling the industrial process for forming fiber lightguides. Teplo i massoperenos: itogi i perspektivy. Minsk, 1985, 108-110. (RZRAB, 86/5Ye449).
343. Bykovskiy, Yu.A.; Dedushenko, K.B.; Zverkov, M.V.; Ivanova, Ye.B.; Likhachev, I.G.; Mamayev, A.N.; Smirnov, V.L. (MIFI). Optical signal transmission with a frequency-switched carrier. KVEKA, no. 5, 1986, 1061-1062.
344. Csocsan, L. (). Problems in the use of fiberoptics (in Hungarian). Muszerugyi es meresteknika kozlemeny, no. 39, 1985, 23-28. (RZFZA, 86/6L648).
345. Davidenko, V.F.; Ploshay, L.L.; Chertov, V.G. (). Method for controlling the alignment of fiber lightguides. OTIZD, no. 45, 1985, 1196792. (RZRAB, 86/6Ye336).
346. Dianov, Ye.M.; Nikonova, Z.S.; Prokhorov, A.M.; Serkin, V.N. (IOF). Spectral filtration of multi-soliton pulses. PZTFD, no. 12, 1986, 752-755.
347. Dianov, Ye.M.; Nikonova, Z.S.; Prokhorov, A.M.; Serkin, V.N. (IOF). Optimal compression of multi-soliton pulses in optical waveguides. PZTFD, no. 12, 1986, 756-760.
348. Domrachev, S.I. (). Effect of the gap between an optical waveguide and periodic system on the diffraction of waveguide modes. IVUZB, no. 2, 1986, 103-104. (RZRAB, 86/6Ye328).
349. Eberlein, D.; Hansel, G. (). Low-feedback coupler for lightguide plug connections. Patent GDR, no. 226396, 21 Aug 1985. (RZRAB, 86/6Ye322).

350. Eberlein, D.; Leidenberger, C. (). Device to obtain a mode equilibrium distribution in parabolic profiled lightguides. Patent GDR, no. 226665, 28 Aug 1985. (RZRAB, 86/5Ye415).
351. Fradin, A.Z.; Braude, V.B.; Vaysleb, Yu.V. (). Calculating the excitation efficiency of dielectric lightguides during their end-face coupling. Obrabotka informatsii v sistemakh svyazi. Leningrad, 1985, 78-82. (RZFZA, 86/5L849).
352. Glebov, L.B.; Mishin, A.V.; Nikonorov, N.V.; Petrovskiy, G.T. (GOI). Waveguide effects in glass substrates. GOI. Trudy, no. 192/2, 1958, 157-165. (RZFZA, 86/6L64).
353. Gofman, M.; Morozov, V.N.; Pletnev, V.A.; Pukhta, M. (FIAN). Field distribution in diffusion strip LiNbO₃ waveguides at the wavelength of 1.3 um. KVEKA, no. 5, 1986, 1055-1058.
354. Golubkov, V.S.; Yevtikhiev, N.N.; Ivanov, N.N.; Papulovskiy, V.F. (MIREA). Device for controlling inhomogeneities of planar optical waveguides. OTIZD, no. 41, 1985, 1190331. (RZRAB, 86/5Ye421).
355. Goncharenko, I.A. (IRE). Three-layer fiber-optic waveguides with an anisotropic core and elliptical inner cladding. KVEKA, no. 5, 1986, 1030-1033.
356. Gorbachev, O.V.; Gorchakov, A.P.; Zhilinskiy, A.P.; Oborotov, V.A. (MEIS). Acoustic sensor for monitoring fiberoptic lightguides. OTIZD, no. 19, 1986, 1233034.
357. Grigor'yants, V.V.; Ivanov, G.A.; Isayev, V.A.; Chamorovskiy, Yu.K. (IRE). Cutoff wavelength in real-time single-mode fiber-optic waveguides. KVEKA, no. 5, 1986, 956-961.
358. Gur'yanov, A.N.; Gusovskiy, D.D.; Dianov, Ye.M.; Karasik, A.Ya.; Kozlov, V.A.; Senatorov, A.K. (IOF). Depolarization of radiation in irregular single mode waveguides. ZTEFA, no. 6, 1986, 1227-1229.
359. Joerges, U. (). Analytical dispersion equation for single-mode lightguides with a graded index profile. NACHA, no. 1, 1986, 28-30. (RZRAB, 86/6Ye262).
360. Kevorkijan, V. (). Obtaining preforms for extracting optical fibers by side chemical deposition (in Serbo-Croatian). TEHBA, no. 11, 1985, 1645-1649. (RZFZA, 86/6L688).

361. Kevorkijan, V. (). Modified chemical vapor deposition technology for obtaining optical fibers (in Serbo-Croatian). TEHBA, no. 10, 1985, 1494-1498. (RZFZA, 86/6L694).
362. Khaytun, F.I. (GOI). Selecting the number of radiated pulses to detect fluctuating optical signals. OPMPA, no. 11, 1985, 6-8.
363. Khoruzhnikov, S.E. (). Mathematical model of the modified chemical vapor deposition method [for fabricating fiber lightguides]. Energoperenos v konvektivnykh potokakh. Minsk, 1985, 90-109. (RZRAB, 86/6Ye469).
364. Kizevetter, D.V.; Malyugin, V.I. (). Signal distortion while coupling a semiconductor laser to a fiberoptic communication line. IVUZB, no. 1, 1986, 75-77. (RZRAB, 86/5Ye312).
365. Klein, G. (). Microoptic assemblies with lens systems for lightguides. FGRTA, no. 12, 1985, 532-534. (RZRAB, 86/6Ye377).
366. Kleinert, P.; Kirchhof, J.; Schmidt, D. (). Preparation of high-purity glasses by chemical vapor deposition with well-defined profiles of refractive index (in English). CISHPMST, 6th, Dresden, 6-10 May 1985. Proceedings 1. Plenary papers/Preparat. Oberlungwitz, 1985, 107-121. (RZFZA, 86/5L80).
367. Kolpashchikov, V.L.; Lanin, Yu.I.; Martynenko, O.G.; Shnip, A.I. (). Effect of temperature conditions on the stability of the drawing of an optical fiber. ZPMFA, no. 3, 1986, 105-112.
368. Kuka, G. (). Damping coefficient and bandwidth of multimode lightguides. Elektronkabel, no. 1, 1985, 30-32. (RZRAB, 86/6Ye274).
369. Kuka, G.; Urban, J.; Wurbs, G. (). Measuring method to determine mode coupling coefficients in lightguides. Patent GDR, no. 224935, 17 Jul 1985. (RZRAB, 86/5Ye414).
370. Kukharev, A.V.; Lipovskiy, A.A.; Aksenov, Ye.T.; Pavlenko, A.V. (). Study on integrated optical coupling elements using a two-dimensional graded index. OPSPA, v. 59, no. 6, 1985, 1281-1285.
371. Lippmann, W. (). Device for equilibrium distribution of modes in lightguides. Patent GDR, no. 225236, 24 Jul 1985. (RZRAB, 86/6Ye353).

372. Mar'yenkov, A.A.; Sinkevich, V.I.; Uryadov, V.N. (). Determining the optimal coefficient of pre-emphasis in transmitting wideband analog signals over optical cables. RELED, no. 14, 1985, 17-20. (RZRAB, 86/5Ye363).
373. Martynova, T.A.; Cherenkov, G.A. (). Mathematical models for searching for elements for high-speed systems to transmit information. MTRLB, no. 6, 1986, 3-10.
374. Milinkis, B.M.; Tikhonov, A.V. (). A device for the reproduction of a mechanical sound track. Author's certificate, no. 1176380. (TKTEA, no. 6, 1986, 16).
375. Morshnev, S.K.; Ryabov, A.S.; Frantsesson, A.V. (). Optical waveguides for sharp bend sensors. RAELA, no. 5, 1986, 1010-1014.
376. Mueller, K.; Kuka, G.; Manthe, H. (). Device for applying the primary layer on lightguides. Elektronkabel, no. 1, 1985, 10-12. (RZRAB, 86/6Ye472).
377. Nechayev, Ye.P. (). Combined detection and estimation of the duration of an optical signal. OTPIA, no. 74, 1986, 37-41. (RZFZA, 86/6L657).
378. Nowak, W.; Rossner, S. (). Eliminating the effect of leaky modes in near-field measurement of the refractive index profile of lightguides. NACHA, no. 1, 1986, 30-32. (RZRAB, 86/6Ye261).
379. Pochapskiy, Ye.P. (FMIANUk). Combined algorithm for estimating the intensity of weak light signals. VINITI. Deposit, no. 1240-V, 21 Feb 1986, 138-141. (RZFZA, 86/6L656).
380. Pomazov, V.V.; Dement'yev, S.A. (). Device for coupling optical fibers. OTIZD, no. 45, 1985, 1196794. (RZRAB, 86/6Ye341).
381. Romaniuk, R. (). Second International Conference on Lightguide Sensors, Stuttgart, 5-7 Oct 1984. EKNTB, no. 3, 1985, 28-32. (RZFZA, 86/5L869).
382. Rudenko, I.P. (). Radiation fields in gradient open waveguides with variable thickness. RAELA, no. 5, 1986, 1018-1021.
383. Sachko, Yu.I.; Skarzhepa, V.A. (KPIA). Beam study on lightguides. UkrNIINTI. Deposit, no. 515-Uk, 11 Feb 1986, 11 p. (RZRAB, 86/6Ye358).

384. Shevchenko, V.V. (). Shift formulae methods in the theory of dielectric waveguides and optical fibers (review article). RAELA, no. 5, 1986, 849-864.
385. Shiganov, S.A. (FMIANUK). Results of studies on optical channels and signals. VINITI. Deposit, no. 1240-V, 21 Feb 1986, 164-166. (RZFZA, 86/6L658).
386. Skarzhepa, V.A.; Sachko, Yu.I. (KPIA). Fabrication of lightguides with active control of the geometric optical characteristics. UkrNIINTI. Deposit, no. 516-Uk, 11 Feb 1986, 14 p. (RZRAB, 86/6Ye452).
387. Skoromnik, D.E.; Kolpashchikov, V.L. (). Coupled waveguides in integrated-optical devices. Energoperenos v konvektivnykh potokakh. Minsk, 1985, 110-118. (RZFZA, 86/6L68).
388. Surazynski, L.; Szustakowski, M. (). Propagation of electromagnetic waves in two mutually coupled multimode electrooptic waveguides. BWATA, no. 8, 1985, 43-51. (RZFZA, 86/6L55).
389. Surazynski, L.; Szustakowski, M. (). Analysis of electromagnetic wave propagation in an electrooptic multimode waveguide (in English). OPAPB, no. 2, 1985, 171-186. (RZRAB, 86/6Ye272).
390. Svakhin, A.S.; Sychugov, V.A. (IOF). Study on the properties of metal and oxide films obtained by magnetron sputtering. IOF. Preprint, no 209, 1985, 32 p. (RZFZA, 86/6L29).
391. Tikhomirov, S.V.; Khleskova, T.N. (). Measurement of dispersion characteristics of optical fiber waveguides. IZTEA, no. 6, 1986, 25-30.
392. Tomanek, P. (). Measuring the time and spectral changes in damping in optical fiber due to OH ion diffusion. JMKOA, no. 9, 1985, 243-245. (RZFZA, 86/5L855).
393. Urban, J.; Kuka, G.; Wurbs, G. (). Method and device to determine damping coefficients in lightguides. Patent GDR, no. 227243, 11 Sep 1985. (RZRAB, 86/6Ye361).
394. Vazsonyi, E. (). Introduction to high-resolution optical lithography. FNMKA, no. 4-5, 1985, 97-101,159,160. (RZRAB, 86/6Ye636).

395. Viergutz, H. (). Current status and developmental trends in lightguide cable technology. Elektronkabel, no. 1, 1985, 1-2. (RZRAB, 86/6Ye295).
396. Volotovskaya, N.K.; Tyutikova, L.A. (). Polarization effects on dispersion in multimode graded-index lightguides. Obrabotka informatsii v sistemakh svyazi. EIS. Leningrad, 1985, 50-53. (RZFZA, 86/6Zh336).
397. Vysloukh, V.A.; Fattakhov, A.M. (MGU). Nonlinear compensation of random pulse dispersionsional broadening. IVYRA, no. 5, 1986, 545-550.
398. Weselhoefft, R. (). Polymers as materials for lightguide fibers. Elektronkabel, no. 1, 1985, 7-9. (RZRAB, 86/6Ye473).
399. Wringe, H. (). Technology for drawing out lightguides for lightguide information transmission. Elektronkabel, no. 1, 1985, 3-6. (RZRAB, 86/6Ye471).
400. Wurbs, G.; Kuka, G. (). Interferometric testing of lightguide preforms. Elektronkabel, no. 1, 1985, 23-24. (RZRAB, 86/6Ye468).
401. Yakhkind, A.K.; Kozmanyan, A.A.; Ovcharenko, N.V. (GOI). Relaxation processes in graded-index glasses obtained by ion exchange. GOI. Trudy, no. 192/2, 1985, 173-181. (RZRAB, 86/6Ye268).
402. Yeliseyev, P.G.; Pham Van Hoi (Fam Van Khoy) (FIAN). Perforation of a thin-film recording medium by the sharp-focused emission of a GaAlAs/GaAs laser. KVEKA, no. 6, 1986, 1261-1264.
403. Yezhov, V.A. (). Coherent optical correlator with combined modulation of the spatial carrier. RAELA, no. 2, 1986, 298-307.
404. Zubruk, G.G.; Ivachevskiy, A.I.; Vul'chin, Yu.G.; Smereka, A.S. (GOI). Treatment method for the ends of optical fibers. OPMPA, no. 6, 1986, 39-41.

C. BEAM PROPAGATION

1. Theory

405. Bejtulahu, R.; Jonoska, M.; Janikijevik, Lj. (). Relationship and difference between diffraction and interference phenomena in interference systems (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 15-24. (RZFZA, 86/5L11).
406. Bel'skiy, A.M.; Shalin, O.Yu. (BGU). Total internal reflection of Gaussian beams from a multilayer structure. VBMFA, no. 1, 1986, 17-21. (RZFZA, 86/5L15).
407. Bersenev, V.I.; Gordiyenko, V.M.; Kurochkin, N.N.; Logutko, A.L.; Priyezzhev, A.V.; Putivskiy, Yu.Ya.; Savin, V.I.; Samorodov, Yu.D. (MGU). Remote laser Doppler diagnostics of aerosol flows. IANFA, no. 6, 1986, 1225-1228.
408. Dmitriyev, A.Ye.; Parshkov, O.M.; Surkin, R.I. (). Transient double resonance under conditions of coherent interaction of radiation and a spectrally inhomogeneous medium. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 216-218.
409. Dukhovner, A.N.; Zanina, K.A. (). Coherence and its rate of change in the environment. TsNIIITEIpriboro. Deposit, no. 3110-pr, 25 Nov 1985, 36-42. (RZFZA, 86/5L20).
410. Ivanov, A.P.; Gavrilovich, A.B.; Borisevich, M.N. (). Polarization of radiation scattered by a spherical volume of a disperse medium. VBSFA, no. 6, 1985, 71-74. (RZFZA, 86/6L75).
411. Janikijevik, Lj.; Jonoska, M.; Mitreska, Z. (). Study on interferograms of conic and elliptic waves (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 25-39. (RZFZA, 86/6L543).

412. Jonoska, M.; Andonovska, N.; Mitreska, Z. (). Moire bands from a system of equidistant parabolas overlapping with a system of equidistant straight lines and a system of equidistant circles (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 53-58. (RZFZA, 86/6L540).
413. Kabanov, M.V.; Kistenev, Yu.V.; Ponomarev, Yu.N. (). Analysis of problems on the propagation of short optical pulses in a linearly absorbing medium. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 212-215.
414. Kandidov, V.P.; Shlenov, S.A. (MGU). Laws governing the distribution of a light field propagating in a medium with cubic nonlinearity. IANFA, no. 6, 1986, 1191-1196.
415. Kessler, S.; Hild, R. (). Theoretical study on the transverse and longitudinal coherence of rotationally symmetric incoherent light sources with an inhomogeneous intensity distribution. EXPPA, no. 6, 1985, 457-471. (RZFZA, 86/5L19).
416. Klim, B.P.; Pochapskiy, Ye.P.; Fedoriv, R.F. (). Statistical analysis of a light signal generated by photoexcitation from a thermal source. OTPIA, no. 74, 1986, 17-21. (RZFZA, 86/6L26).
417. Kopa-Ovdiyenko, A.L. (). Using Lagrange coordinates for modeling of light beams with strong spatial deformation. ZVMFA, no. 2, 1986, 311-315. (RZFZA, 86/6L121).
418. Nazyrov, Z.F.; Shul'ga, S.N. (KhGU). Resonance phenomena in the wave diffraction zone. UkrNIINTI. Deposit, no. 546-Uk, 12 Feb 1986, 20 p. (RZFZA, 86/6L10).
419. Niibizi, A.; Komotskiy, V.A. (UDN). Theoretical analysis of the interaction between optical waves and a system of spatially distributed periodic gratings. Part 1. System of two gratings. VINITI. Deposit, no. 661-V, 29 Jan 1986, 34 p. (RZFZA, 86/5L13).
420. Vinogradov, A.V.; Zorev, N.N. (FIAN). Optical theorem for scattering at an interface. DANKA, v. 286, no. 6, 1986, 1377-1379.

421. Vovkotrub, V.P.; Mamontova, Yu.M.; Popov, I.V. (). Classroom demonstration of lightwaves. FIZSA, no. 2, 1986, 49. (RZFZA, 86/6A110).
422. Yeflov, V.B.; Il'inskiy, Yu.A. (PetGU). Monte-Carlo method in problems on the propagation of polarized radiation in media with strong anisotropic scattering. VINITI. Deposit, no. 708-V, 31 Jan 1986, 15 p. (RZFZA, 86/5L16).
423. Zdravkovik, N. (). Analogy between holographic bands and moire bands from two gratings (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 59-64. (RZFZA, 86/6L542).

2. Propagation in the Atmosphere

424. Abramyan, A.S.; Kazaryan, R.A.; Mnatsakanyan, T.A. (). Performance improvement of an atmospheric optical homodyne receiver. RAELA, no. 6, 1986, 1174-1177.
425. Ageyev, B.G.; Kurov, A.Yu.; Nikolayev, V.D.; Ponomarev, Yu.N.; Svistun, M.I.; Filimonova, V.A. (). Study on the absorptivity of molecular gases and air at the lasing wavelengths of iodine lasers. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 169-173.
426. Ageyev, B.G.; Kurov, A.Yu.; Nikolayev, V.D.; Ponomarev, Yu.N.; Svistun, M.I.; Filimonova, V.A. (IOA). Study on the absorption of pulsed iodine laser radiation by molecular gases and air. IVUFA, no. 6, 1986, 96-98.
427. Aref'yev, V.N. (). Molecular absorption of CO₂ laser radiation in an atmospheric window of relative transparency at 8-13 um. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 107-111.
428. Aref'yev, V.N.; Baranov, Yu.I.; Visheratin, K.N.; Sizov, N.I. (). Selective absorption of laser radiation by water vapor at the P40 and P20 lines of the 00^{(sup)0}1-10^{(sup)0}0 band of CO₂. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 198-201.
429. Aref'yev, V.N.; Visheratin, K.N. (). Calculating the coefficients of absorption of CO₂ laser radiation by atmospheric ammonia. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 193-197.

430. Banakh, V.A.; Buldakov, V.M.; Mironov, V.L. (IOA). Thermal self-action of a partially coherent laser beam in a turbulent atmosphere. KVEKA, no. 6, 1986, 1220-1226.
431. Belov, N.N. (). Optical fields in corundum particles in the spectral region of a CO₂ laser. ZPSBA, v. 44, no. 6, 1986, 948-953.
432. Borisova, N.F.; Bukova, Ye.S.; Vasilevskiy, K.P.; Ladygin, I.N.; Osipov, V.M.; Pavlov, N.I. (). Coefficients of atmospheric absorption and parameters of H₂O lines in the ν_(sub2) band region. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 98-102.
433. Borisova, N.F.; Osipov, V.M.; Pavlov, N.I. (). Absorption of CO laser radiation in the atmosphere. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 188-192.
434. Boyko, S.A.; Popov, A.I.; Sadchikhin, A.V. (). Absorption of He-Ne laser radiation at 5.4 μm in nitric oxide. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 227-230.
435. Bufetov, I.A.; Fedorov, V.B.; Fomin, V.K. (). Propagation of an optical flame along a tube. FGVZA, no. 3, 1986, 18-29.
436. Bufetov, I.A.; Fedorov, V.B.; Fomin, V.K. (IOF). Measuring the normal rate of optical combustion of an atmospheric optical discharge in a neodymium laser beam. IOF. Preprint, no. 23, 1986, 22 p. (RZFZA, 86/6L1140).
437. Gadzhi-Zade, F.M.; Guliyev, I.S.; Feyzullayev, A.A. (NPOKIANAZ). Possibility of using satellite measurements of methane in the atmosphere to study the global distribution of its sources. DAZRA, no. 6, 1986, 47-50.
438. Godlevskiy, A.P.; Kopytin, Yu.D.; Lazarev, S.V. (IOA). Intracavity laser detection of phase fluctuations of infrared radiation in a turbulent atmosphere. KVEKA, no. 6, 1986, 1302-1305.
439. Godlevskiy, A.P.; Kopytin, Yu.D.; Ostanin, S.A.; Sharin, P.P. (). Natural gas analysis of the atmosphere by intracavity coherent detection in a CO₂ laser. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 103-106.

440. Godlevskiy, A.P.; Kopytin, Yu.D.; Sharin, P.P. (). Study on the possibility of increasing the concentration sensitivity of CO₂ lidar detection lasers for gas analysis of the atmosphere. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 178-180.
441. Godlevskiy, A.P.; Sharin, P.P. (). Highly sensitive gas analysis of the atmosphere in the 10.6 um region by intracavity laser spectroscopy with a long resonator. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 181-182.
442. Khaytun, F.I.; Pleshanov, Yu.V. (GOI). Problems in the theory of signal optimization in pulsed optical ranging systems. GOI. Trudy, no. 192, 1985, 206-216. (RZFZA, 86/5L1325).
443. Konkurin, Yu.L.; Kurbasov, V.V.; Lobanov, V.F.; Lypkan', N.M.; Ovsyankin, M.A. (FIAN). Precise time and frequency system for laser ranging of the moon. FIAN. Preprint, no. 294, 1985, 11 p. (RZRAB, 86/5Ye547).
444. Korshunov, V.A. (). Determination of the extinction coefficient profile in an aerosol medium by two-wave sounding. ZPSBA, v. 44, no. 6, 1986, 991-996.
445. Koziratskiy, Yu.L.; Potekhetskiy, S.V.; Smirnov, A.V. (). Determining the number of pulses in a laser ranging system. RATEA, no. 2, 1986, 80-82. (RZRAB, 86/6Ye566).
446. Kuznetsov, V.N.; Nosov, A.V. (IOAN). Laser wave-recorder. OKNOA, no. 3, 1986, 528-531.
447. Makushkin, Yu.S.; Mitsel', A.A.; Firsov, K.M. (IOA). Effect of the variation in temperature and humidity on 10.6 um radiation absorption. IFAOA, no. 6, 1986, 595-599.
448. Makushkin, Yu.S.; Mitsel', A.A.; Ponomarev, Yu.N.; Rudenko, V.P.; Firsov, K.M. (). Physical fundamentals of an automated system for studying the interaction of intense optical radiation and the atmosphere. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 112-116.
449. Makushkin, Yu.S.; Petrova, A.I.; Stroynova, V.N. (). Effect of spectral line broadening in atmospheric gases on the absorption of narrowband optical radiation. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 202-206.

450. Milyutin, Ye.R.; Frezinskiy, B.Ya.; Samel'son, G.M. (). Frequency and spatial correlation of parameters of optical waves in a turbulent atmosphere. Obrabotka informatsii v sistemakh svyazi. Leningrad, 1985, 62-68. (RZFZA, 86/5Zh223).
451. Naats, I.E. (). Theory of multifrequency laser ranging of aerosols in small illuminated volumes. Tomsk filial Sibirsogo otdeleniya Akademii nauk SSSR. Preprint, no. 38, 1985, 53 p. (RZFZA, 86/6L1208).
452. Nadeyev, A.I.; Shelevoy, K.D. (IOA). Estimating the intensity of lidar signals in photon counting in terms of reduced data. VINITI. Deposit, no. 897-V, 7 Feb 1986, 18 p. (RZFZA, 86/5L1326).
453. Pleshanov, Yu.V.; Vereshchaka, A.I. (GOI). Laser systems to determine the coordinates of aircraft near runways during takeoff and landing. GOI. Trudy, no. 192, 251-257. (RZRAB, 86/5Ye556).
454. Ponomarev, Yu.N.; Ponomareva, S.B.; Terletskaya, S.V.; Firsov, K.M. (). Optical models of nonlinear absorption in the atmosphere for radiation at 10.6 um. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 207-211.
455. Prokopov, A.V. (). Integral representation of ray equations in geometric optics. PZTFD, no. 24, 1985, 1526-1529.
456. Pustovalov, V.K. (BPI). Diffuse convective vaporization of droplets by intense optical radiation, allowing for the temperature dependences of the transfer coefficients. INFZA, vol. 50, no. 5, 1986, 718-724.
457. Sheyfot, A.I.; Gaydukov, M.N. (MOPI). Lateral movement of an aerosol particle in a laser radiation field. ZTEFA, no. 5, 1986, 951-954.
458. Ustinov, N.D.; Moiseyev, V.N.; Tikhomirov, V.A.; Troitskiy, I.N.; Shugayev, M.M. (). Time of appearance of optical breakdown in air at a solid surface. KVEKA, no. 5, 1986, 918-923.
459. Vetrov, A.A.; Kulyasov, A.G.; Marasin, L.Ye.; Sokolov, S.A. (GOI). Airborne laser profile recorders: new practical means for forest evaluation, ice patrols and geodetic surveys. GOI. Trudy, no. 192, 230-250. (RZRAB, 86/5Ye555).

460. Volyak, K.I.; Mikhalevich, V.G.; Shevchenko, T.B.; Shugan, I.V. (IOF). Laser measurement of the statistical properties of the sea surface. IANFA, no. 6, 1986, 1111-1116.
461. Voytsekhovskaya, O.K.; Zuyev, V.V.; Ippolitov, I.I.; Trifonova, N.N. (). Using double resonance absorption to determine the composition of the atmosphere. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 223-226.
462. Zhulanov, Yu.V.; Zagaynov, V.A.; Lushnikov, A.A.; Lyubovtseva, Yu.S.; Nevskiy, I.A.; Stulov, L.D. (NIFKHI). Highly dispersed and submicron arid-zone atmospheric aerosols. IFAOA, no. 5, 1986, 488-496.

3. Propagation in Liquids

463. Adzhemyan, L.V.; Adzhemyan, L.Ts.; Zubkov, L.A.; Orekhova, N.V.; Romanov, V.P. (). Study on the kinetics of the order parameter in the isotropic phase of liquid crystals by means of a three-way Fabry-Perot standard. OPSPA, v. 59, no. 6, 1985, 1169-1172.
464. Bayev, S.G.; Vedernikov, V.M.; Kir'yanov, V.P.; Kogalapkin, G.Yu.; Fortus, V.M. (TOI). Improving the accuracy of measurements of the fine structure of the density field of seawater. TOI. Preprint, no. not given, 1985, 18 p. (RZGFA, 86/5V45).
465. Damm, T.; Kaschke, M.; Kresser, M.; Noack, F.; Rentsch, S.; Triebel, W. (). Ultrashort pulse spectrometer based on a neodymium phosphate glass laser and its use to study photophysical processes. EXPPA, no. 5, 1985, 409-416. (RZFZA, 86/5L1298).
466. Gorkavenko, V.V. (). Brightness coefficient at the interface of two media [in measuring the profile of the ocean floor]. Perekhodnye yavleniya v okeane, atmosfere i litosfere. Vladivostok, 1985, 13-17. (RZGFA, 86/6V240).
467. Romashko, Ye.A.; Rudin, G.I.; Shabunya, S.I. (ITMO). Dynamics of laser breakdown of transparent liquids. ITMO. Preprint, no. 25, 1985, 31 p. (RZFZA, 86/5L1268).
468. Romashko, Ye.A.; Rudin, G.I.; Shabunya, S.I. (). Dynamics of the breakdown of transparent liquids under the action of nanosecond laser pulses. Teplo i massoperenos: itogi i perspektivy. Minsk, 1985, 102-104. (RZRAB, 86/5Ye653).

469. Simonenko, Z.G.; Poray-Koshits, A.B.; Ovchinnikov-Sazonov, A.M.; Molochnikov, B.I. (GOI). Methods for measuring gradients of concentration in liquid media. OPMPA, no. 8, 1985, 48-54.
470. Zubkov, L.A.; Orekhova, N.V. (). Study on the near part of the Rayleigh line wing in water. OPSPA, v. 60, no. 1, 1986, 208-210.

4. Adaptive Optics

471. Basov, N.G.; Kovalev, V.I.; Musayev, M.A.; Fayzullov, F.S. (FIAN). Wavefront reversal of pulsed CO₂ laser radiation. Obrashcheniye volnovogo fronta lazernogo izlucheniya. FIAN. Trudy, no. 172, Moskva, Nauka, 1986, 116-179.
472. Basov, N.G.; Vasin, A.P.; Yefimkov, V.F.; Zubarev, I.G.; Smirnov, M.G.; Sobolev, V.B. (FIAN). Hypersonic wavefront reversal mirror operating according to an oscillator-amplifier scheme. KVEKA, no. 6, 1986, 1201-1206.
473. Basov, N.G.; Yefimkov, V.F.; Zubarev, I.G.; Mikhaylov, S.I. (FIAN). Forming the space-time structure of light waves from stimulated scattering in hypersound. Obrashcheniye volnovogo fronta lazernogo izlucheniya. FIAN. Trudy, no. 172, Moskva, Nauka, 1986, 10-115.
474. Bolotskikh, L.T.; Butenko, A.V.; Popkov, V.G.; Popov, A.K.; Shalayev, V.M. (IFSOAN). CO₂ laser radiation wavefront reversal in a three-beam interaction scheme. KVEKA, no. 5, 1986, 1058-1061.
475. Gavryushenko, B.S.; Kurenkov, A.V.; Mozgovoy, V.N.; Novikov, V.V.; Semenova, G.I.; Shanin, O.I. (GOI). Adaptive interferometer. OPMPA, no. 8, 1985, 27-28.
476. Goryachkin, D.A.; Kalinin, V.P.; Kozlovskaya, I.M.; Komin, I.A.; Romanov, N.A. (). CO₂ amplifier with a mirror utilizing degenerate four-wave interaction. KVEKA, no. 5, 1986, 900-905.
477. Kabanov, V.V.; Rubanov, A.S.; Tolstik, A.L.; Chaley, A.V. (IFANB). Dynamic holograms and four-wave phase conjugation in crystals. IFANB. Preprint, no. 411, 1986, 34 p. (RZFZA, 86/6L1093).
478. Kavun, A.A.; Osetrov, V.P.; Popov, A.I.; Sklizkov, G.V.; Fedotov, S.I. (FIAN). Amplifying element for an active mirror. FIAN. Preprint, no. 333, 1986, 10 p. (RZFZA, 86/6L666).

479. Krivoshchekov, V.A.; Mamayev, A.V.; Pilipetskiy, N.F.; Shkunov, V.V. (IPMe). Quality of wavefront reversal under stimulated Brillouin scattering in fiber lightguides. VINITI. Deposit, no. 1049-V, 13 Feb 1986, 27 p. (RZFZA, 86/5L1236).
480. Krivoshchekov, V.A.; Pilipetskiy, N.F.; Shkunov, V.V. (IPMe). Dependence of the quality of wavefront reversal under stimulated scattering in a fiber-optic waveguide upon conditions of radiation coupling. KVEKA, no. 6, 1986, 1264-1266.
481. Orlov, V.V. (). Resolution during the reversal of a wave field through a thin inhomogeneous medium. OPSPA, vol. 60, no. 6, 1986, 1221-1225.
482. Safronov, A.N.; Troitskiy, I.N. (). Phase measuring method in coherent optics. AVMEB, no. 6, 1985, 98-103.
483. Sherstobitov, V.Ye. (). Device for wavefront reversal. OTIZD, no. 40, 1985, 1188695. (RZRAB, 86/6Ye500).
484. Sukhorukov, A.P.; Trofimov, V.A. (). Mathematical modeling of multiparametric problems in nonlinear adaptive optics. Metody matematicheskogo modelirovaniya, avtomatizatsii obrabotki nablyudeniy i ikh primeneniya. MGU. Moskva, 1986, 105-120. (RZFZA, 86/6L667).
485. Trofimov, V.A. (). Adaptive automatic focusing in delay systems. OPSPA, v. 59, no. 5, 1985, 1153-1155.
486. Umarov, G.Ya.; Mirzayev, A.T.; Yakubov, A.N. (). Interferometric method for reconstructing images of objects by coincidences. DANUA, no. 12, 1985, 24-25. (RZFZA, 86/5L675).
487. Ustinov, N.D.; Anufriyev, A.V.; Vol'pov, A.L.; Zimin, Yu.A.; Tolmachev, A.I. (). Maximization of sharpness functions upon observation of objects in coherent light through a randomly inhomogeneous medium. KVEKA, no. 5, 1986, 937-941.
488. Yerokhin, A.I.; Kovalev, V.I.; Fayzullov, F.S. (FIAN). Using nondegenerate four-wave interaction to measure the parameters of nonlinear response in liquids in an acoustic resonance field. FIAN. Preprint, no. 7, 1986, 23 p. (RZFZA, 86/6L1192).
489. Zel'dovich, B.Ya.; Orlova, M.A.; Shkunov, V.V. (IPMe). Four-wave parametric oscillation in a scheme with transverse pumping. KVEKA, no. 5, 1986, 967-972.

490. Zuyev, V.Ye. (). Atmospheric adaptive optics. IVUFA, no. 11, 1985, 3-5. (RZFZA, 86/6L664).

D. COMPUTER TECHNOLOGY

491. Berezhnoy, A.A.; Sherstneva, T.N. (GOI). Electrooptic devices in optical information processing systems. GOI. Trudy, no. 192, 1985, 267-282. (RZRAB, 86/5Ye704).
492. Dumarevskiy, Yu.D.; Kovtonyuk, N.F.; Petrovicheva, G.A.; Savin, A.I. (GOI). Refocusing of images in an optical system with optically controlled transparencies using metal-dielectric-semiconductor--liquid crystal structures. OPMPA, no. 11, 1985, 8-11.
493. Kotov, B.A. (). Matrix optical information converters in the visible region. Fotopriyemniki i fotopreobrazovateli. FTI. Leningrad, Nauka, 1986, 131-147.
494. Vodovatov, I.A.; Vysotskiy, M.G.; Petrun'kin, V.Yu.; Rogov, S.A.; Samsonov, V.G. (). System for recording and processing optical signals based on charge-coupled devices and the Elektronika 60M microcomputer. AVMEB, no. 6, 1985, 76-80.

E. HOLOGRAPHY

495. Andreyev, S.Ye.; Andreyev, R.B.; Nikashin, V.A.; Ovechkina, T.G. (NIKFI). Problems of pulsed photography of color holographic motion picture images by means of solid state YAG lasers with frequency doubling and stimulated Raman conversion. NIKFI. Trudy, no. 122, 1985, 64-69. (RZFZA, 86/6L745).
496. Andreyeva, O.V.; Sukhanov, V.I. (). Using the parameters of a developed photographic layer to calculate the diffraction efficiency of unbleached three-dimensional holograms. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFa. NPGAN. Leningrad, Nauka, 1986, 43-51.
497. Asimov, M.M.; Nikashin, V.A. (NIKFI). Flashlamp-pumped pulsed dye lasers for photography and printing of color holographic motion picture images. NIKFI. Trudy, no. 122, 1985, 70-73. (RZFZA, 86/6L744).
498. Barikhin, B.A.; Dudarevich, A.L.; Nedolugov, V.I. (). Investigation of plasma-dynamic processes by high-speed holography. ZPSBA, v. 44, no. 6, 1986, 1006-1009.

499. Bondarenko, V.G. (). Position of a volume hologram image reconstructed by small aperture beams. ZPSBA, v. 44, no. 5, 1986, 863-867.
500. Brodzeli, M.I.; Gilel's, A.M.; Dekanozishvili, G.G.; Yeligulashvili, I.A.; Chernov, G.M. (). Diphenylbenzylamine and carbon tetrabromide layers as media for the holographic recording of information. ZNPFA, no. 3, 1986, 212-214.
501. Bugayev, A.A.; Zakharchenya, B.P. (). Holographic temporal diagnostics with picosecond resolution. OPSPA, vol. 60, no. 5, 1986, 1043-1047.
502. Denisyuk, Yu.N. (). Displaying of wave fields by static Doppler three-dimensional holograms. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 4-9.
503. Denisyuk, Yu.N.; Davydova, I.N. (). Recording of light models of orthogonal functions in three-dimensional holograms. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 9-17.
504. Ebralidze, T.D. (). Anisotropic holographic diffraction grating. OPSPA, vol. 60, no. 6, 1986, 1269-1272.
505. Furduyev, A.V.; Takhtarov, B.V.; Shpuntov, A.I.; Umanskiy, Yu.K.; Lapides, A.A. (NIKFI). Method for copying soundtracks [for holographic motion pictures]. OTIZD, no. 42, 1985, 1191938. (RZRAB, 86/5Ye718).
506. Gal'pern, A.D.; Kalinina, I.V.; Selyavko, L.V.; Smayev, V.P. (). Production of relief-phase holograms on PE-2 photoplates and their reproduction. OPSPA, vol. 60, no. 5, 1986, 1040-1042.
507. Garibashvili, K.A.; Mumladze, V.V.; Svanidze, M.M.; Timofeyeva, E.Ye. (). Effect of 10.6 um laser radiation on color centers in KCl, KBr, and NaCl single crystals. OPSPA, vol. 60, no. 6, 1986, 1211-1214.
508. Jagoszewski, E. (). Third-order aberration coefficients of a Fraunhofer hologram formed at the spherical surface of the recording medium (in English). OPAPB, no. 1, 1985, 111-117. (RZFZA, 86/5L885).

509. Janikijevik, Lj. (). Elliptical hologram as a wave condensor (in Macedonian). Godisen zbornik. Fakultet za fizika. Univerzitetski centar za matematicko-tehnicki nauki na univerzitetot vo Skopje, vol. 34, 1984, 35-51. (RZFZA, 86/5L887).
510. Kakichashvili, Sh.D.; Tarasashvili, V.I. (). Photoinduced anisotropy of selenium-cadmium KS-19 glass. OPSPA, vol. 60, no. 5, 1986, 1071-1073.
511. Kartasheva, O.A.; Kononenko, I.I.; Gruz, E.A. (). Study on the possibility of reducing noise level in holographic photographic materials. Svetochuvstvitel'nyye materialy dlya fotograficheskoy registratsii opticheskikh informatsii. VGNIPIKFP. Moskva, 1985, 29-33. (RZFZA, 86/5L895).
512. Korolev, A.Ye.; Nazarov, V.N.; Stasel'ko, D.I. (). Holographic recognition of high-speed images based on resonance atomic media. PZTFD, no. 12, 1986, 732-737.
513. Korzinin, Yu.L.; Sukhanov, V.I. (). Space and frequency variant of the theory of three-dimensional holograms. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 52-74.
514. Kostyshin, M.T.; Romanenko, P.F.; Stronskiy, A.V.; Kolomiyets, T.M.; Sopinskiy, N.V. (). Effect of the thickness of the metal layer on the process of recording in holographic diffraction gratings consisting of a photosensitive As_(sub2)Se_(sub3)-As_(sub2)S_(sub3)-Ag system. UFIZA, no. 1, 1986, 55-59. (RZFZA, 86/6L736).
515. Kryukov, V.V.; Dukhopel, I.I. (GOI). Relation of the parameters of a manufacturing process and the deformation characteristics of a photothermoplastic film. OPMPA, no. 5, 1986, 46-47.
516. Kuleshov, A.M.; Shubnikov, Ye.I.; Smayeva, S.A. (). Matched holographic filter. OPSPA, vol. 60, no. 6, 1986, 1273-1276.
517. Mazurenko, Yu.T. (). Recording, reconstruction and conversion of light pulses by volume spectral holograms. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 91-104.
518. Miler, M. (). Optical holography of today (in Czech). Matematika a fyzika ve skole, no. 4, 1985-1986, 242-249. (RZFZA, 86/5A80).

519. Nowak, J.; Zajac, M. (). Numerical investigations of holographic imaging quality (in English). OPAPB, no. 3, 1985, 239-248. (RZRAB, 86/6Ye723).
520. Ovechkina, T.G. (NIKFI). Characteristic diffraction curves of high-resolution photomaterials for holography. NIKFI. Trudy, no. 122, 1985, 134-144. (RZFZA, 86/6L733).
521. Popov, A.P.; Kavtrev, A.F.; Veniaminov, A.V.; Lashkov, G.I. (). Longwave limit of spectral sensitivity of reoxane polymers. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 82-91.
522. Rostovtseva, N.V. (NIKFI). Multilayer holographic optical element consisting of thin phase holograms. NIKFI. Trudy, no. 122, 1985, 108-117. (RZFZA, 86/6L746).
523. Saari, P.M.; Rebane, A.K.; Kaarli, R.K. (). Recording of space-time holograms in spectral highly selective media. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 30-43.
524. Serov, O.B.; Mashkovtsev, A.N.; Dudareva, L.G. (NIKFI). Pulsed lasers for holographic motion picture photography. NIKFI. Trudy, no. 122, 1985, 55-63. (RZFZA, 86/6L743).
525. Shelekhov, N.S.; Bandyuk, O.V.; Popov, A.P.; Rebezov, A.O. (). Using phenanthrenequinone for photobleaching of three-dimensional phase holograms in a reoxane medium. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 74-82.
526. Skochilov, A.F. (). Diffraction of plane TM waves by a three-dimensional phase grating. OPSPA, v. 60, no. 1, 1986, 132-136.
527. Skochilov, A.F.; Sattarov, F.A. (). Secondary gratings in three-dimensional phase holograms. OPSPA, vol. 60, no. 6, 1986, 1264-1268.
528. Smayev, V.P.; Bryskin, V.Z.; Znamenskaya, Ye.M.; Kursakova, A.M.; Shakhova, I.B. (GOI). Two-layer photomaterial hologram recording characteristics. OPMPA, no. 5, 1986, 38-41.

529. Smolovich, A.M (NIKFI). Possibility of multiple use of a zero beam in hologram reconstruction. NIKFI. Trudy, no. 122, 1985, 118-120. (RZFZA, 86/6L756).
530. Stepanov, S.I. (). Transient mechanisms of holographic recording in photorefractive crystals. Opticheskaya golografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 17-30.
531. Veniaminov, A.V.; Lashkov, G.I. (). Hologram recording in passing beams on reoxan of various modifications. OPSPA, vol. 60, no. 6, 1986, 1259-1263.
532. Voronin, Ye.N. (). Optimal solutions on the average, of problems in selective holography. IVUZB, no. 2, 1986, 16-29. (RZRAB, 86/6Ye737).
533. Yashin, N.M. (IBFiz). Identification of interference bands during their breakup at the walls of a cuvette. PRTEA, no. 3, 1986, 175-177.
534. Zelenskiy, A.A.; Lukin, V.V. (). Digital reconstruction of images by phase holograms with displacement. IVUZB, no. 2, 1986, 100-102. (RZFZA, 86/6Zh276).

F. LASER-INDUCED CHEMICAL REACTIONS

535. Adamova, Yu.A.; Skachkov, A.N.; Sosnina, G.F. (). N₂F₄ and NF₃ reactions, stimulated by resonance radiation of a CO₂ laser. KHFID, no. 5, 1986, 620-627.
536. Apatin, V.M.; Bagratashvili, V.N.; Ionov, S.I.; Letokhov, V.S.; Lokhman, V.N.; Makarov, G.N. (ISAN). Direct photoionization measurements of slow decay rates of vibrationally overexcited [CF₃]₃Cl molecules in the ground electron state in a molecular beam. ISAN. Preprint, no. 1, 1985, 36 p. (RZFZA, 86/6D227).
537. Bonch-Bruyevich, A.M.; Libenson, M.N.; Makin, V.S. (). Role of high-power electromagnetic wave generation in the action of intense light on condensed media. OPSPA, v. 59, no. 6, 1985, 1350-1354.
538. Borisevich, N.A.; Dorokhin, A.V.; Sukhodola, A.A. (). Efficiency of forming singlet excited molecules in a triplet-triplet annihilation process. OPSPA, v. 59, no. 2, 1985, 1327-1330.

539. Bunkin, N.F.; Luk'yanchuk, B.S.; Shafeyev, G.A. (IOF). Thermoelectrochemical instability in laser heating of absorptive electrolyte solutions. IANFA, no. 6, 1986, 1176-1181.
540. Bychkov, S.G.; Desyatkov, A.V.; Biketov, A.A.; Ksandopulo, G.I. (). Kinetic laws governing laser pyrolysis of epoxy resin. FGVZA, no. 3, 1986, 88-91.
541. Bykovskiy, Yu.A.; Lisyutenko, V.N.; Potapov, M.M.; Chistyakov, A.A. (MIFI). Interaction between resonance ultraviolet laser radiation and nitroaromatic crystals. KVEKA, no. 5, 1986, 1022-1024.
542. Kozlova, Ye.K.; Portnyagin, A.I.; Filippov, A.Ye. (MGU). Thermogradient model of laser action on self-catalytic reactions. IANFA, no. 6, 1986, 1235-1237.
543. Kreysig, D. (). Laser photochemistry. WIFOA, no. 1, 1985, 282-284. (RZRAB, 86/6Ye707).
544. Kuz'min, M.V.; Letokhov, V.S.; Stuchebryukhov, A.A. (NITsTLAN). Threshold energy dependence of the rate of intramolecular vibrational relaxation in an isolated polyatomic molecule. ZETFA, v. 90, no. 2, 1986, 458-470.
545. Letokhov, V.S. (). Laser-induced processes in spectroscopy, isotope separation and photochemistry. UFNAA, v. 148, no. 1, 1986, 123-141. (RZFZA, 86/5L174).
546. Malyshev, G.F.; Telegin, G.G. (SKTBSEAP). Resonance ionization of laser-excited atoms. ZTEFA, no. 6, 1986, 1195-1198.
547. Perov, A.A.; Stepanov, A.N.; Kabanov, S.P.; Simonov, A.P. (NIFKHI). Ionization of inert gas atoms in Rydberg states in collisions with thermal energy molecules. KHFID, no. 5, 1986, 609-614.
548. Pimenov, V.P.; Skachkov, A.N. (). Dynamics of laser heating and changes of the optical density of an absorbing gas. KHFID, no. 6, 1986, 856-858.
549. Ristoiu, T.; Candea, R.M.; Mercea, V. (). Optoacoustic and optothermal methods to study multiphoton absorption of IR laser radiation [for isotope separation]. SCEFA, no. 9, 1985, 790-814. (RZFZA, 86/6L174).

550. Tugov, I.I. (IOF). Nonlinear photoprocesses in diatomic molecules. Experiment and theory. IANFA, no. 6, 1986, 1148-1154.

551. Zagrebin, S.B.; Samson, A.V. (). Study on ionization collisions under selective optical excitation of a barium atom beam. LZFTA, no 6, 1985, 118-119. (RZFZA, 86/5D272).

G. MEASUREMENT OF LASER PARAMETERS

552. Bagayev, S.N.; Chebotayev, V.P. (). Laser frequency standards. UFNAA, v. 148, no. 1, 1986, 143-178. (RZFZA, 86/5L1061).

553. Goncharov, V.K.; Kvachenok, V.G.; Kolesnik, A.V.; Kolesnikov, V.N.; Kontsevoy, V.L.; Revinskiy, V.V.; Tovmasyan, S.K.; Chernyavskiy, A.F. (FIAN). Optical multichannel analyzer to study two-dimensional intensity distributions. FIAN. Preprint, no. 12, 1986, 25 p. (RZFZA, 86/6L608).

554. Gongadze, A.Sh.; Mirzayev, A.T. (TashGU). Correlator and photon counter based on a minicomputer. PRTEA, no. 3, 1986, 98-101.

555. Gutsaki, V.N.; Dindarov, V.E.; Zholnerov, V.S.; Petrun'kin, V.Yu.; Semenov, V.V. (). Multiphoton resonance in ruby vapor under hyperfine optical pumping. OPSPA, v. 60, no. 1, 1986, 201-203.

556. Il'in, V.Ye.; Kuprevich, V.V.; Petrova, L.I.; Semenov, Ye.P. (GOI). Visualization of IR laser radiation. GOI. Trudy, no. 192, 1985, 83-96. (RZFZA, 86/5L1134).

557. Kufert, S.; Hackerott, J. (). Method for fabricating absorption elements [to measure laser power]. Patent GDR, no. 226598, 28 Aug 1985. (RZRAB, 86/5Ye498).

558. Levi, A.M.; Chereugin, V.L. (). Time marker for a digital printing device. IZTEA, no. 6, 1986, 37-39.

559. Shurgaya, R.R. (). Theoretical investigation of the sensitivity of a wide-aperture means of measurement of high power laser radiation. IZTEA, no. 6, 1986, 30-33.

H. LASER MEASUREMENT APPLICATIONS

1. Direct Measurement by Laser

560. Adrianova, I.I.; Zaslavskaya, V.R.; Korunnyy, V.N.; Chizhikov, G.G. (GOI). Coherent laser systems for measuring motion parameters. GOI. Trudy, no. 192, 1985, 258-267. (RZFZA, 86/5L1314).
561. Akopyan, I.G.; Semeykin, N.P.; Fil', V.A.; Sharshin, Yu.A. (). Device for discrete measurement of the signal frequency of a laser Doppler velocimeter. OTIZD, no. 19, 1986, 1233058.
562. Aleksandrov, K.S.; Andrianov, G.O.; D'yakonov, A.M.; Zamkov, A.V.; Lemanov, V.V. (FTI). Photoelastic characteristics of PbCl₂ crystals at 10.6 um. PZTFD, no. 12, 1986, 737-740.
563. Aleksandrov, M.L.; Asinovskiy, L.M.; Melytsin,, A.L.; Tolokonnikov, V.A. (). Methods and apparatus of complete ellipsometry. ZPSBA, v. 44, no. 6, 1986, 887-908.
564. Andrushchak, Ye.A.; Bakshtam, B.M.; Vasil'yev, V.P.; Vilkov, S.A.; Karaul'nik, A.Ye.; Podubnyak, V.Ya.; Tychinskiy, V.P. (). Optoelectronic device for measuring the amplitudes of the acoustic vibrations of a surface. OTIZD, no. 18, 1986, 1231411.
565. Apostol, D.; Berbulescu, D.; Komissarova, I.I.; Ostrovskaya, G.V.; Ostrovskiy, Yu.I.; Shedova, Ye.N. (FTI). Method for studying phase objects. OTIZD, no. 17, 1986, 1229567.
566. Azizov, M.A.; Bakhtin, V.G.; Polukhina, S.P. (). Using optical holography to study stress deformation states in metal dental bridge prostheses. Stomatologiya, no. 6, 1985, 66-68. (LZSTA, 26/86, 95725).
567. Barvinskiy, L.L.; Lizhdvoy, K.Ya.; Svirid, V.A.; Khotyaintsev, S.N. (). Evaluating the performance of fiberoptic sensors. IVUZB, no. 1, 1986, 78-79. (RZRAB, 86/6Ye432).
568. Belea, A. (). Using lasers in plasma diagnostics. SCEFA, no. 10, 1985, 895-924. (RZFZA, 86/5G394).
569. Belinskiy, A.V.; Chirkin, A.S. (MGU). Fabry-Perot interferometer with random phase inhomogeneities. KVEKA, no. 5, 1986, 906-913.

570. Belousova, I.M.; Gorshkov, A.S.; Ivanov, I.P.; Ivanovskaya, M.I. (GOI). Large-baseline laser interferometers for geophysical research. GOI. Trudy, no. 192, 1985, 163-173. (RZFZA, 86/5L1319).
571. Bendere, R.B.; Kalnynya, R.P.; Felty'n', I.A.; Freyvalde, I.R. (). Ellipsometric study on the surface of CdTe single crystals. LZFTA, no. 2, 1986, 81-84. (RZFZA, 86/6L389).
572. Berdnikov, V.S.; Ganzherli, N.M.; Gurevich, S.B.; Maurer, I.A. (FTI). Real-time holographic interferometry study on free convection in hidden cavities. FTI. Preprint, no. 996, 1986, 18 p. (RZFZA, 86/6L728).
573. Bilenko, D.I.; Belobrovaya, O.Ya.; Ignat'yev, A.S.; Mokerov, V.G.; Pylayev, S.Ye.; Ryabinin, I.V. (NIIMF). Determination of the thickness and composition of epitaxial layers during the formation of a GaAs-Ga_(subl-x)Al_(subx)As structure. ZTEFA, no. 6, 1986, 1198-1201.
574. Blistanov, A.A.; Geras'kin, V.V.; Stepanova, A.V.; Mirtova, Ye.G. (MISIS). The effect of an external electric field on the pyroelectric field in LiNbO_(sub3). FTVTA, no. 5, 1986, 1344-1347.
575. Bondarenko, A.N.; Kondrat'yev, A.I.; Trotsenko, V.P. (). Method for ultrasonic [and laser] quality control of products. OTIZD, no. 19, 1986, 1233046.
576. Bornmann, V.; Winkler, T.; Ulke, S. (). Light signal projector for measuring variable diameters of light spots. Patent GDR, no. 226669, 28 Aug 1985. (RZRAB, 86/5Ye616).
577. Burmasov, V.S.; Kruglyakov, E.P.; Semenov, Ye.P.; Khil'chenko, A.D. (IYaFSOAN). Nine-channel laser interferometer with a general tunable initial phase. IYaFSOAN. Preprint, no. 139, 1985, 14 p. (RZFZA, 86/6G399).
578. Churayev, A.L.; Stasel'ko, D.I.; Kuznetsov, S.I.; Alekseyev, V.P. (GOI). Apparatus for the measurement of dynamic deformations of diffusely scattered objects by holographic, moire and speckle interferometric methods. OPMPA, no. 5, 1986, 22-24.
579. Dmitriyev, A.V.; Zinov'yev, V.V.; Zak, Ye.A. (). Optical sensors in industrial robot sensitization systems. ZRBEA, no. 12, 1985, 60-68.

580. Domnin, Yu.S.; Kopylov, L.N.; Koshelyayevskiy, N.B.; Ovchinnikov, S.N.; Tatarenkov, V.M. (). Portable lasers as a component of a single standard of time, frequency, and length. IZTEA, no. 6, 1986, 7-8.
581. Domnin, Yu.S.; Malimon, A.N.; Tatarenkov, V.M.; Shumyatskiy, P.S. (). Radiooptic frequency bridge of a single standard of time, frequency, and length. IZTEA, no. 6, 1986, 5-7.
582. Dubovikova, Ye.A.; Dubovikov, M.S. (). Regularization, experimental errors and estimation of accuracy in tomography and interferometry. OPSPA, v. 60, no. 1, 1986, 172-178.
583. Gerasimenko, B.P.; Zemlyanoy, A.P.; Knigavko, N.V. (KhIIZhT). Technical control algorithm for a laser gyroscope direction finder. VINITI. Deposit, no. 97-V, 3 Jan 1986, 7 p. (RZRAB, 86/5Ye703).
584. Gol'dberg, M.M.; Vikaruk, A.Ya.; Sokolov, S.V.; Suminov, I.V. (MATI). Study on the performance of an end-type plasma accelerator triggered by an electrical explosion of a foil. IVUFA, no. 6, 1986, 8-12.
585. Gorlov, S.N.; Gorshkov, V.A.; Fomin, O.N. (). Method for monitoring the surface shapes of optical components. OTIZD, no. 18, 1986, 1231408.
586. Grigor'yeva, T.M.; Levitskiy, A.A.; Polak, L.S.; Potapkin, B.V.; Rusanov, V.D.; Fridman, A.A. (INKhS). Mathematical modeling of the dissociation of CO₂ in a supersonic flow of non-equilibrium plasma. KHVKA, no. 3, 1986, 279-283.
587. Gusev, V.G.; Lazarev, S.V. (GOI). Speckle interferometric indication of the decentering of a lens. OPMPA, no. 6, 1986, 3-5.
588. Ivanov, S.V.; Chrenyy, V.V. (VZMI). Fiberoptic refractometer. TSNIITEIpriboro. Deposit, n. 3137-pr, 30 Dec 1985, 47 p. (RZFZA, 86/5L872).
589. Karlov, N.V.; Kononov, N.N.; Kuz'min, G.P.; Orlov, N.G.; Toker, G.R. (IOF). Holographic interferometry of shock waves initiated by a gigawatt CO₂ laser pulse on a transparent target. KVEKA, no. 6, 1986, 1294-1297.
590. Keldysh, L.V.; Tikhodeyev, S.G. (LGU). Interference of light waves with sub-Poisson statistics and the sensitivity of laser gravitational observations. ZETFA, vol. 90, no. 6, 1986, 1889-1899.

591. Kerstan, F.; Brueckner, V. (). Device for generation of laser-controlled ultrashort electric pulses. Patent GDR, no. 225581, 31 Jul 1985. (RZRAB, 86/5Ye615).
592. Ketkovich, A.A.; Mirovitskaya, S.D. (). Measurement of the geometric parameters of small objects. MTRLB, no. 6. 1986, 18-28.
593. Korotkov, A.N. (). Laser anemometer with signal discrimination by delayed coincidence. TVYTA, no. 6, 1985, 1216-1218. (RZFZA, 86/6A208).
594. Kozubskiy, E.V.; Skryl', I.I. (OIYaI). Vertex detector. OTIZD, no. 46, 1985, no. 1098408A. (RZFZA, 86/6V696).
595. Kromin, S.I.; Lyubimov, V.V.; Shekhtman, V.N. (). Measurement of a scattered light-wave component. KVEKA, no. 5, 1986, 962-966.
596. Lashkov, G.I.; Veniaminov, A.V.; Ratner, O.B. (). Holographic relaxometry study on diffusion of anthracene structure compounds in polymethyl methacrylate. VYSAA, v. A28, no. 2, 1986, 435-439. (RZFZA, 86/6Ye878).
597. Lunin, B.S. (). Oscillograph measurements in pulsed infrared photochemistry. ZFKHA, no. 6, 1986, 1579.
598. Medovikov, A.S. (). Principles in the construction of interference rangefinders. IZTEA, no. 11, 1985, 10-12. (RZRAB, 86/5Ye558).
599. Misiun, R.; Warminski, L. (). Demonstration of wave interference by means of Fresnel band plates (in Polish). Fizyka w szkole, no. 4-5, 1985, 241-242. (RZFZA, 86/5A102).
600. Nilov, Ye.V. (GOI). Use of lasers for high-speed filming of fast-flow processes. GOI. Trudy, no. 192, 1985, 127-135. (RZFZA, 86/5L949).
601. Petrov, P.G. (). Refraction and differential measurements in coherent optics. OPSPA, v. 59, no. 5, 1985, 1148-1151.
602. Popescu, Gh. (). Single frequency He-Ne laser used as sub-angstrom detector (in English). RRPQA, no. 7, 1985, 567-571. (RZRAB, 86/5Ye597).

603. Popov, Yu.V.; Bednyagin, A.A.; Zakharov, A.I.; Lamanov, A.L.; Neverov, L.A.; Pobotayev, V.G.; Rossomakho, F.V. (GOI). Compact optical rangefinders and prospects for their development. GOI. Trudy, no. 192, 1985, 185-205. (RZFZA, 86/5L873).
604. Pyzin, G.P. (ChPI). Functional possibilities for optical systems in speckle interferometry of the shift of diffuse reflecting objects. VINITI. Deposit, no. 1473-V, 5 Mar 1986, 23 p. (RZRAB, 86/6Ye681).
605. Pyzin, G.P.; Artemenko, S.B.; Ignat'yev, A.G. (ChPI). Correction of rigid and deformation displacements in a speckle-interferometry displacement. ZTEFA, no. 5, 1986, 868-872.
606. Rinkevichyus, B.S.; Tolkachev, A.V.; Sutorshin, V.N.; Chebunin, V.G. (). Laser Doppler anemometry for the measurement of excessively slow speeds. IZTEA, no. 5, 1986, 18-20.
607. Rzepka, J.; Nowicki, R. (). Competition effect between rotational levels in plasma diagnostics. OPAPB, n. 1, 1985, 91-96. (RZFZA, 86/5L1315).
608. Smirnov, V.A.; Arkhipov, A.A.; Nanasov, M.P. (). Holographic interferometry study on resonant vibrations of structurally non-uniform plates. IVUSA, no. 6, 1986, 25-29.
609. Tarlykov, V.A. (). Error of a laser diffractometer of small linear dimensions, inserted with an optical Fourier process. IZTEA, no. 6, 1986, 22-23.
610. Tursunov, A.T.; Eshkobilov, N.B.; Akilov, R.; Korniyenko, V.V. (). Laser photoionization spectrometer. OPSPA, vol. 60, no. 6, 1986, 1284-1287.
611. Vasil'yev, P.Ye.; Yasyulenis, E.I.; Karmanov, L.L. (). Optical methods for experimental studies on harmonic high-frequency vibrations. CMSPMEKZ, Kiyev, Sep 1984. Materialy. Kiyev, Naukova dumka, 1986, 284-288.
612. Vasiliu, V.; Bachmann, P.; Maris, Z.; Moldovan, C.; Georgescu, M. (). The ELAC-1 He-Ne laser system for orientation in coal mines. SCEFA, no. 9, 1985, 838-840. (RZFZA, 86/6L1230).
613. Volkonskiy, V.B.; Yakovlev, V.V. (GOI). Highly accurate laser rangefinders for geophysics, hydraulic engineering and machine building. GOI. Trudy, no. 192, 1985, 217-229. (RZRAB, 86/5Ye551).

614. Voropay, Ye.S.; Karas', V.I.; Lomako, V.M.; Torpachev, P.A. (). Method for measuring optical characteristics of objects. Author's certificate USSR, no. 1198387, 15 Dec 1985. (RZFZA, 86/6L714).
615. Vus, B.S. (). Measuring elastic displacements in construction projects at sonic and ultrasonic loading frequencies. CMSPMEKZ, Kiyev, Sep 1984. Materialy. Kiyev, Naukova dumka, 1986, 288-292.
616. Willsch, R.; Schwotzer, G.; Jahn, J.U.; Haubenreisser, W. (). Lightguide phase sensors: current status and prospects (in German). CIWKILme, 30th, 21-25 Oct 1985. Heft 2. Vortragsr. B. Ilmenau, 1985, 107-110. (RZRAB, 86/5Ye396).
617. Yakovlev, V.A. (). Using ellipsometry of anisotropic media to study surface films on crystals. PFKMD, no. 1, 1986, 23-28. (RZFZA, 86/5L53).
618. Zakharov, A.A.; Astrov, D.N.; Belyanskiy, L.B.; Dedikov, Yu.A.; Polunin, S.P. (VNIFTRI). Interference mercury manometer. PRTEA, no. 3, 1986, 196-201.
619. Zaychenko, O.V. (GOI). Chamber for holographic interferometry with a photothermoplastic medium. OPMPA, no. 6, 1986, 17-18.
620. Zosimov, V.V.; Lyamshev, L.M. (). Contactless measurements of high-frequency vibrations. CMSPMEKZ, Kiyev, Sep 1984. Materialy. Kiyev, Naukova dumka, 1986, 278-284.

2. Laser-Excited Optical Effects

621. Anisimov, V.N.; Baranov, V.Yu.; Derkach, O.N.; Dykhne, A.M.; Malyuta, D.D.; Pis'menny, V.D.; Rysev, B.P.; Sebrant, A.Yu. (). High-speed resonance as a method of selective excitation of surface waves in solids. ZFPRA, v. 43, no. 1, 1985, 13-15.
622. Baltrameynas, R.; Kuokshtis, E.; Tamulaytis, G. (). Observation of exciton luminescence in CdCe crystals. LFSBA, no. 1, 1986, 56-62. (RZFZA, 86/5L552).
623. Baltrameynas, R.; Zhukauskas, A.; Tamulaytis, G. (VilGU). Screening of electron-phonon interaction in strongly excited cadmium selenide. FTPPA, no. 6, 1986, 1141-1143.

624. Baltrameyunas, R.; Zhukauskas, A.; Tamulaytis, G. (VilGU). The interaction of longitudinal optical phonons with overdamping non-equilibrium plasmons in GaAs. FTVTA, no. 5, 1986, 1576-1577.
625. Belousov, A.V.; Keloglu, O.Yu. (). Resonance transmission of energy in donor-acceptor vapors. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 83-92.
626. Belyakov, L.V.; Goryachev, D.N.; Sachenko, A.V.; Sreseli, O.M. (FTI). Anomalous photoeffect at a cuprous oxide - electrolyte interface. FTPPA, no. 5, 1986, 876-880.
627. Benderskiy, V.A.; Krivenko, A.G. (IKhF). Kinetics of an emitted charge during laser photoelectron emission from a metal in solution. ELKKA, no. 6, 1986, 735-741.
628. Benderskiy, V.A.; Krivenko, A.G.; Kurmaz, V.A. (IKhF). Electrode reactions of methanol and ethanol radicals on mercury. ELKKA, no. 5, 1986, 644-651.
629. Benderskiy, V.A.; Krivenko, A.G.; Fedorovich, N.V. (IKhF). Electrode reactions of intermediate particles formed during the reduction of a bromate anion on mercury. ELKKA, no. 6, 1986, 728-734.
630. Blaszczak, Z. (). Influence of molecular interactions on optical orientation of pyridine methyl derivatives. Part 1. Optical birefringence and light scattering studies (in English). ATPLB, v. A68, no. 4, 1985, 629-636. (RZFZA, 86/5L175).
631. Bochkarev, V.V.; Sedletskiy, O.A. (). Device to study the photoelectric properties of zinc selenide with residual conductivity in the edge region of fundamental absorption. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 132-139.
632. Bochkarev, V.V.; Sedletskiy, O.A. (). Electric and photoelectric homogeneity of zinc selenide with residual conductivity. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 139-141.

633. Bondar', I.I.; Dudich, M.I.; Suran, V.V. (UzhGU). Formation of singly and doubly-charged ions during nonlinear ionization of strontium and barium ions by laser radiation in the 16800 -18000 cm^(sup-1) frequency range. ZETFA, vol. 90, no. 6, 1986, 1952-1962.
634. Brazovskiy, V.Ye.; Brazovskaya, N.V. (API). Quantum theory of the motion of an adsorbate in a resonance field. VINITI. Deposit, no. 591-V, 27 Jan 1986, 13 p. (RZFZA, 86/5L479).
635. Bresler, M.S.; Gusev, O.B.; Stepanov, A.O. (FTI). The density of an electron-hole plasma excited in a semiconductor. FTVTA, no. 5, 1986, 1387-1392.
636. Bykovskiy, V.A.; Zyatkova, N.I.; Tkachev, V.D. (BGU). Radiative recombination of excitons associated with radiation defects in germanium. FTPPA, no. 12, 1985, 2207-2209.
637. Chayka, M.P. (). Molecular beam self-alignment. OPSPA, vol. 60, no. 6, 1986, 1103-1106.
638. Damaskin, I.A.; Popovich, N.S.; Grincheshen, I.N. (). Relaxation of photoconductivity in A^(sup3)B^(sup5)C^(sup6) compounds at conventional and high levels of optical excitation. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 104-112.
639. Dotsenko, A.V.; Zakharov, V.K.; Morozov, A.V. (GOI). Theoretical study on photothermal effects in photochromic glasses. GOI. Trudy, no. 192/2, 1985, 211-218. (RZFZA, 86/6L783).
640. Gastev, S.V.; Imamov, E.Z.; Sokolov, N.S.; Yassiyevich, I.N. (FTI). Optical selective pumping and quasi-resonance intervalley scattering of electrons by neutral donors in multivalley semiconductors. ZETFA, vol. 90, no. 5, 1986, 1830-1842.
641. Gavril'yuk, A.P.; Krasnov, I.V. (). Efficient cooling of a rarefied gas of resonance microparticles under the simultaneous action of light pressure and nonselective force. ZTEFA, no. 11, 1985, 2273-2275.
642. Golovko, L.N.; Negriy, V.D.; Osip'yan, Yu.A. (IFTT). Overcorrecting of defects formed under plastic deformation of cadmium sulfide. FTVTA, no. 6, 1986, 1717-1722.

643. Grachev, A.I.; Petrov, M.P.; Krasin'kova, M.V. (FTI). "Photovoltaic active" centers in $\text{Bi}(\text{sub}12)\text{SiO}(\text{sub}20)$ crystals. FTVTA, no. 5, 1986, 1530-1532.
644. Il'inova, T.M.; Fortygin, A.A. (MGU). Dynamics of a laser probe pulse in photoexcited semiconductors. IANFA, no. 6, 1986, 1229-1234.
645. Ivanov, A.B. (ITM). Acceleration of [0.1-1 microgram-sized] objects in a gas laser beam. VINITI. Deposit, no. 8245-V, 28 Nov 1985, 47 p. (RZFZA, 86/5G189).
646. Karachevtsev, V.A. (FTINT). Triplet excitons in quasi-one-dimensional crystals of a naphthalene-tetrachlorophthalic anhydride complex with charge transfer. FTVTA, no. 5, 1986, 1400-1407.
647. Karlik, I.Ya.; Mirlin, D.N.; Sapega, V.F.; Yakovlev, Yu.P. (FTI). Spectrum and polarization of photoluminescence in indirect band gap semiconductor crystals of $\text{Ga}(1-x)\text{Al}(x)\text{As}$. FTVTA, no. 6, 1986, 1869-1875.
648. Karlov, N.V.; Laguchev, A.S.; Orlov, A.N.; Petrov, Yu.N.; Aleksandresku, R.; Draganesku, V.; Mikhaylesku, I.; Morzhan, I. (). Influence of laser radiation on flows of resonance molecules through capillaries in transition regions of flows. PZTFD, no. 10, 1986, 596-599.
649. Khabarov, S.E.; Shilova, M.V.; Orlov, V.M.; Kolosov, Ye.Ye. (GGU; GIFTI). Optical absorption in $\text{Bi}(\text{sub}12)\text{TiO}(\text{sub}20)$ single crystals and films. IVNMA, no. 6, 1986, 1044-1046.
650. Khoshimov, M.M.; Blistanov, A.A.; Kiselev, B.S.; Starodubtsova, M.P.; Azamatov, Z.T. (MISIS). Linear electrooptical effect in L-lysine hydrochloride crystals. IUZFA, no. 3, 1986, 70-73.
651. Konovodchenko, V.A.; Sivakov, A.G.; Zhuravel', A.P.; Yefremenko, V.G.; Banduryan, B.B. (FTINT). Laser probe study on resistance states of film superconductors. FNTED, no. 5, 1986, 548-552.
652. Korolev, V.V.; Gritsan, N.P.; Bazhin, N.M. (IKhKG). Determination of the movement of molecular oxygen in vitreous matrices by quenching of the phosphorescence of phenanthrene. KHFID, no. 6, 1986, 730-736.

653. Kozlovskiy, S.I.; Moin, M.D. (IPANUK). Transverse photovoltaic effect in silicon due to the intervalley diffusion repopulation of electrons under laser excitation. FTPPA, no. 5, 1986, 806-810.
654. Krasheninnikov, A.A.; Shablya, A.V. (). Allowing for the effect of triplet-triplet absorption while using the optoacoustic effect to measure the quantum luminescence yield from highly excited molecular states. OPSPA, v. 60, no. 1, 1986, 70-73.
655. Kukhta, V.R.; Lopatin, V.V.; Petrov, P.G. (). Device for studying the initial stage of an electrical discharge in dielectrics. EOBMA, no. 3, 1986, 66-68.
656. Kuklev, Yu.I. (GNIIKhTES). Electron emission from ceramic plastics under CO₂ laser irradiation. ONIITEKhim. Deposit, no. 186-KhP, 30 Jan 1986, 7 p. (RZFZA, 86/5Zh562).
657. Levdanskiy, V.V. (). Photoinduced drift of gases in porous objects. Energoperenos v konvektivnykh potokakh. Minsk, 1985, 119-126. (RZFZA, 86/6L1167).
658. Minogin, V.G. (). Compression of atomic beams by laser-radiation pressure. OPSPA, vol. 60, no. 5, 1986, 1061-1064.
659. Perkal'skis, B.Sh.; Ostrovskiy, V.A. (SFTI). Demonstration on natural and induced optical activity and the Pockels effect. IVUFA, no. 6, 1986, 95-96.
660. Petrakovskiy, G.A.; Patrin, G.S. (IFSOAN). Effect of the optical excitation of impurity holmium ions on magnetic resonance in yttrium iron-garnet. ZETFA, vol. 90, no. 5, 1986, 1769-1780.
661. Seysyan, R.P.; Yuldashev, Sh.U. (FTI). Low-temperature photoluminescence from heteroepitaxial layers of lead telluride. FTVTA, no. 5, 1986, 1348-1352.
662. Shilova, M.V.; Orlov, V.M.; Leonov, Ye.I.; Kolosov, Ye.Ye.; Karpovich, I.A. (). Photoconductivity in manganese- and chrome-doped Bi_{(sub12)SiO(sub20)} single crystals. IVNMA, no. 1, 1986, 103-106. (RZFZA, 86/5N567).

663. Skripko, G.A.; Shkadarevich, A.P.; Yermolenko, N.N.; Gorodetskaya, O.G.; Belokon', M.V.; Shagov, A.A. (BPI). Effect of radiative defects on the photoconductivity and luminescence of aluminum borosilicate copper glass. FTVTA, no. 6, 1986, 1840-1845.
664. Sukhodol'skiy, A.T. (IOF). Light channeling phenomena. IANFA, no. 6, 1986, 1095-1102.
665. Vaytkus, Yu.; Kazhukauskas, V.; Storasta, Yu. (). Overcharging of recombination and scattering centers in gallium arsenide under pulsed excitation. LSFBA, no. 6, 1985, 114-125. (RZFZA, 86/5N560).
666. Verkhovskaya, K.A.; Fridkin, V.M.; Shlenskiy, A.L.; Ben'kova, L.F.; Vlader, N.B.; Zolotova, V.I. (IKAN). Electrophotographic process based on pyroelectric and photovoltaic effects in polyvinylidene fluoride polymer ferroelectrics. ZNPFA, no. 3, 1986, 176-184.
667. Vessler, G.R.; Krylov, V.S.; Shvarts, P.; Linde, Kh. (IELAN). Optical and electrochemical study on dissipative structures in electrolyte solutions. ELKKA, no. 5, 1986, 623-628.
668. Yatsenko, A.V.; Sergeyev, N.A. (). Photorefractive effect in LiNbO₃ and its relation to nuclear paramagnetic resonance of ⁹³Nb. DUKAB, no. 12, 1985, 58-60. (RZFZA, 86/6N842).
769. Zarembo, L.K.; Merkurova, S.P. (). Photoacoustic study on thermal properties of ferroelectrics in the region of phase transition. KRISA, no. 6, 1985, 1197-1199. (RZFZA, 86/5N975).
670. Zuyev, V.A.; Mudryy, A.V.; Bychkov, A.G. (). Luminescence in silicon films. IVUFA, no. 6, 1986, 117-119.

3. Laser Spectroscopy

671. Akhmedzhanov, R.; Bulanin, M.O.; Granskiy, P.V.; Pen'shin, A.M. (). Determining various electrooptic constants of CO₂ molecules by induced absorption in the nu_(sub2)+nu_(sub3) band region. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 276-279.
672. Alimpiyev, S.S.; Zasavitskiy, I.I.; Karlov, N.V.; Kosichkin, Yu.V.; Nadezhdinskiy, A.I.; Nikiforov, S.M.; Odabashyan, G.L.; Omel'yanchuk, A.M.; Sartakov, B.G.; Stepanov, Ye.V.; Ushakov, A.I.; Khusnutdinov, A.N.; Shotov, A.P. (). Diode laser spectroscopy measurement of the instantaneous progressive temperature of a polyatomic molecular gas. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 192-196.
673. Aliyev, Ye.T.; Bagayev, V.S.; Belen'kiy, G.L.; Godzhayev, M.O.; Salayev, E.Yu. (IFANAZ). High temperature electron-hole liquid in stratified gallium sulfide. ZFPRA, vol. 43, no. 9, 1986, 440-442.
674. Andreyev, S.V.; Letokhov, V.S.; Mishin, V.I. (ISAN). Laser resonance photoionization detection of the tracks of a (sup221)Fr radioactive isotope in a sample. ZFPRA, vol. 43, no. 12, 1986, 570-572.
675. Apanasevich, P.A.; Kilin, S.Ya.; Nizovtsev, A.P. (). Kinetic equations in the theory of absorption spectra and scattering of high-power radiation. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 1. Tomsk, 1986, 56-75.
676. Avarmaa, R.A.; Renge, I.V. (). Spectral evidence of the anomalous temperature dependence of luminescence decay for Eu³⁺ in solution. OPSPA, vol. 60, no. 5, 1986, 980-982.
677. Bakhrakh, V.L.; Vetchinkin, S.I.; Umanskiy, I.M.; Izleva, L.D. (). Quasiclassical theory of resonant Raman scattering. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 44-49.
678. Bayev, V.M.; Gamaliy, V.F.; Sviridenkov, E.A.; Toptygin, D.D. (FIAN). Nonlinear processes in intracavity laser spectroscopy. FIAN. Preprint, no. 347, 1985, 29 p. (RZFZA, 86/6L1178).

679. Bayramov, B.Kh.; Lichkova, N.V.; Timofeyev, V.D.; Toporov, V.V. (FTI). Experimental detection of fine structure in Raman spectra of RbAg₄I₅ superionic crystals. FTVTA, no. 5, 1986, 1543-1547.
680. Belyayeva, A.A.; Predtechenskiy, Yu.B. (). Effect of the environment on the spectral and temporal characteristics of thulium atoms isolated in solid neon. OPSPA, vol. 60, no. 6, 1986, 1130-1137.
681. Bobovich, Ya.S.; Vovk, S.M.; Petrov, V.I.; Tsenter, M.Ya.; Sharygin, L.M. (). Effect of anatase and rutile particle size on the intensity of their Raman spectra. OPSPA, v. 59, no. 6, 1985, 1390-1392.
682. Bolduan, F.; Hoenle, W.; Hochheimer, H.D.; Henkel, W. (). Temperature and high pressure Raman study of M₃P₇ (M=Li, Na, K, Rb, Cs) compounds. PSSBB, v. B132, no. 1, 1985, 41-50. (RZFZA, 86/6L374).
683. Borisova, N.F.; Bukova, Ye.S.; Ladygin, I.N. (). Parameters of HDO absorption lines in the region of lasing frequencies of DF lasers. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 147-150.
684. Burakov, V.S.; Malashonok, V.A.; Nechayev, S.V.; Puko, R.A.; Shedenkov, S.I. (). Study on the sensitivity of intracavity spectroscopy in dye lasers of nanosecond duration. ZPSBA, v. 44, no. 5, 1986, 757-761.
685. Bykov, A.D.; Gomboyev, V.Ts.; Zotov, O.V.; Makarov, V.S.; Moskalenko, N.I.; Naumenko, O.V.; Ulenikov, O.N. (). Study on the fine structure of HDO and D₂O spectra around 2.5 um. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 112-114.
686. Bykov, A.D.; Savel'yev, V.N.; Serdyukov, V.I.; Sinitsa, L.N.; Ulenikov, O.N.; Tsyganova, Ye.V. (). Absorption spectrum of H₂O in the shortwave range. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 115-117.
687. Bykovskiy, P.I.; Lebedev, V.A.; Pisarenko, V.F.; Popov, V.V. (). Structure and spectral-luminescent properties of hexaaluminates of the rare-earth elements (review article). ZPSBA, v. 44, no. 5, 1986, 711-728.
688. Chel'tsov, V.F. (MIU). Nonlinear and stimulated effects in the resonance fluorescence of one and two atoms. KVEKA, no. 5, 1986, 1010-1016.

689. Dmitriyev, Yu.N.; Kulikov, A.N.; Kaledin, L.A.; Kobylyanskiy, A.I.; Shenyavskaya, Ye.A. (). Laser fluorescence spectrum of GdO molecules. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 136-140.
690. Dobryakov, V.V.; Monyakin, A.P.; Kuzyakov, Yu.Ya. (). Study on the spectra and laser fluorescence kinetics of MgO, CaO and SrO molecules. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 121-123.
691. Dobryakov, V.V.; Monyakin, A.P.; Kuzyakov, Yu.Ya. (). Automatic device to study spectra and laser fluorescence kinetics of molecules. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 124-127.
692. Dolzhikov, V.S.; Dolzhikov, Yu.S.; Makarov, A.A.; Movshev, V.G.; Ryabov, Ye.A. (ISAN). Resonant two-photon spectroscopy of vibrational transitions of molecules under four-wave frequency mixing. KVEKA, no. 5, 1986, 887-899.
693. Dolzhikov, Yu.S.; Letokhov, V.S.; Makarov, A.A.; Malinovskiy, A.L.; Ryabov, Ye.A. (ISAN). Inter- and intramolecular distribution of vibrational energy during infrared multiphoton excitation. The CF₃Br molecule. ZETFA, vol. 90, no. 6, 1986, 1982-1994.
694. Faynberg, B.D. (). Stochastic theory of three-pulsed transient scattering to study dephasing processes. OPSPA, v. 60, no. 1, 1986, 120-125.
695. Gakamskiy, D.M.; Nemkovich, N.A.; Rubinov, A.N.; Tomin, V.I.; Chaykovskiy, Ye.V. (IFANB). Automated nanosecond laser spectrofluorimeter. IFANB. Preprint, no. 401, 1986, 35 p. (RZFZA, 86/6L567).
696. Gladkov, S.M.; Koroteyev, N.I.; Rychev, M.V.; Sergeyev, V.N.; Fedorov, A.B. (MGU). Nonlinear spectroscopy of excited atoms, molecular gases and plasma. IANFA, no. 6, 1986, 1139-1147.
697. Gladkov, S.M.; Koroteyev, N.I.; Rychev, M.V.; Sergeyev, V.N.; Fedorov, A.B. (MGU). Four photon spectroscopy of excited nitrogen. PZTFD, no. 12, 1986, 728-732.

698. Gladyschuk, A.A.; Gurskiy, A.L.; Parashchuk, V.V.; Yablonskiy, G.P. (). Effect of temperature and illumination on streamer discharges in cadmium sulphide and selenide single crystals. ZPSBA, v. 44, no. 6, 1986, 978-982.
699. Goldovskiy, V.L.; Kravchenko, V.I.; Kraysler, O.D.; Terenetskaya, I.P.; Tsitkin, A.I. (IFANUk). Correlation spectrometry based on tunable multifrequency filters and lasers. IFANUk. Preprint, no. 28, 1985, 45 p. (RZFZA, 86/6L1196).
700. Golubev, V.G.; Ivanov-Omskiy, V.I. (). Laser photoelectric magnetospectroscopy of impurities in semiconductors. Neravnovesnyye protsessy v poluprovodnikakh (Nonequilibrium processes in semiconductors). FTI. Leningrad, 1986, 146-179.
701. Gorbunov, S.V.; Zakurdayev, I.V.; Muchnik, M.L.; Suslov, A.I.; Sheroziya, G.A.; Shishlakov, V.A. (). Selective laser ionization of atoms by an atomized ion beam. PZTFD, no. 11, 1986, 681-685.
702. Gorelik, V.S. (FIAN). Laser spectroscopy of inelastic light scattering as a method to study inhomogeneities and perturbations in solids. FIAN. Preprint, no. 103, 1985, 15 p. (RZFZA, 86/6L1195).
703. Govorun, D.N.; Klimenko, V.A; Korotkov, P.A. (). Interaction of low-frequency optical vibrations in a potassium-dihydrophosphate crystal. OPSPA, vol. 60, no. 5, 1986, 993-997.
704. Irmer, G. (). Effect of the instrument function on the determination of the transverse cross-section and lifetime of the optical phonon spectrum. EXPPA, no. 6, 1985, 501-506. (RZFZA, 86/5L277).
705. Irmer, G.; Heinrich, A.; Monecke, J. (). First order Raman scattering in CdSnP_(sub2). PSSBB, v. B132, no. 1, 1985, 93-98. (RZFZA, 86/6L377).
706. Ivanov, A.A.; Kamalov, V.F.; Koroteyev, N.I.; Orlov, R.Yu. (MGU). Nonlinear and luminescence spectroscopy of vibrational- and electron-excited oxygen in the liquid phase. IANFA, no. 6, 1986, 1238-1245.
707. Kamalov, V.F.; Koroteyev, N.I.; Toleutayev, B.N.; Chikishev, A.Yu.; Shkurnikov, A.P. (MGU). Picosecond active Raman spectroscopy of biological specimens. IANFA, no. 6, 1986, 1197-1201.

708. Katayev, M.Yu.; Mitsel', A.A.; Tinchurina, E.G. (). Mathematical formulation and methods for solving problems of gas analysis of multicomponent mixtures from absorption spectra. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 117-121.
709. Kielich, S. (). Multiphoton scattering spectroscopy (in Polish). Sprawozdania - Poznanskie Towarzystwo Przyjaciol Nauk, Wydzial Matematyczno-Przyrodniczy, no. 100, 1982(1984), 23-47. (RZFZA, 86/6L152).
710. Kink, R.A.; Kil'k, A.V.; Lepasaar, T.P.; Lykhmus, A.E.; Maksimov, Yu.A.; Mikhkel'soo, V.T.; Erme, E.K. (IFANEST). Laser vacuum ultraviolet source for high-resolution spectroscopy. KVEKA, no. 5, 1986, 999-1003.
711. Kiselev, A.A.; Lyaptsev, A.V.; Zuyev, A.N. (). Resonance infrared radiation interacting with 1-doubling in the microwave spectrum of a linear molecule. OPSPA, vol. 60, no. 5, 1986, 953-959.
712. Kochanov, V.P. (). Absorption line shape of molecular gases in the presence of a low-frequency electric field. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 271-275.
713. Kompan, M.Ye.; Venus, G.B.; Dimitrova, O.V.; Litvin, B.N.; Popova, T.B. (FTI). Luminescence spectra of Na₅TbSi₄O₁₂ superionic conductors. FTVTA, no. 6, 1986, 1944-1946.
714. Kornilov, S.T.; Ostreykovskiy, I.V.; Protsenko, Ye.D. (). Optothermal detectors for laser spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 213-217.
715. Kotlikov, Ye.N.; Khryashchev, L.Yu. (). Measuring the absolute intensity of an atomic beam by resonant fluorescence observations. OPSPA, v. 60, no. 1, 1986, 184-186.
716. Kotchigova, S.A. (). Relativistic calculation of radiationless-transition probabilities in barium. OPSPA, vol. 60, no. 6, 1986, 1116-1121.
717. Kovarskiy, V.A.; Keloglu, O.Yu. (). Induced separation of optical spectra of impurity pairs in solids. IZFMB, no. 2, 1986, 62-64.

718. Kozin, G.I.; Konovalov, I.P.; Narubin, S.L.; Protsenko, Ye.D.; Terekhin, A.V. (). Polarization method in nonlinear laser spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 218-221.
719. Krivtsun, V.M.; Nadezhdin, B.B.; Britov, A.D.; Zasavitskiy, I.I.; Shotov, A.P. (). Spectrum of NH₂-radical nu₂ band obtained with diode lasers. OPSPA, vol. 60, no. 6, 1986, 1162-1164.
720. Krivtsun, V.M.; Nadezhdin, B.B.; Kuritsyn, Yu.A.; Britov, A.D.; Zasavitskiy, I.I.; Shotov, A.P. (). Diode laser spectroscopy of NH₂ radicals obtained under pulsed photolysis. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 98-102.
721. Kuleshov, N.V.; Boykov, V.N.; Krasovskiy, A.N. (). Spectra of the selectively excited luminescence of a frozen aqueous uranyl sulphate solution. ZPSBA, v. 44, no. 5, 1986, 861-863.
722. Kulikov, V.V.; Aganbekyan, K.A.; Gulyayev, G.A.; Plokhotnyuk, Ye.F.; Semenov, A.A.; Sokolov, A.V. (). Contribution of water vapor to selective absorption in the 9-12 um range. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 103-107.
723. Kulikov, V.V.; Aganbekyan, K.A.; Gulyayev, G.A.; Zhuravlev, V.Ye.; Romanovtsev, V.V. (). Automated complex and software for spectrum analysis in the IR. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 286-289.
724. Kuritsyn, Yu.A.; Mironenko, V.R.; Pak, I.; Snegirev, Ye.P.; Zasavitskiy, I.I.; Shotov, A.P. (). Intracavity detection of molecules by means of a tunable diode laser in the medium IR. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 203-207.
725. Kuz'min, M.V.; Stuchebryukhov, A.A. (). Homogeneous IR spectrum width of polyatomic molecules and threshold of intramolecular vibrational relaxation. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 4-6.
726. Kuznetsov, V.A.; Soboleva, L.V.; Ugarov, V.V.; Chernov, A.A.; Eventova, I.L. (IKAN). Raman spectra of light from microscopic inclusions in Y(HCOO)₃ 2H₂O crystals and the hypothesis of an ordered near-surface layer of a solution. KRISA, no. 3, 1986, 618-621.

727. Kuznetsova, L.A.; Chumak, L.V. (MGU). Thermometry of heated gases by molecular spectra. Part 2. Laser diagnostic methods. VINITI. Deposit, no. 81-V, 3 Jan 1986, 27 p. (RZFZA, 86/5L340).
728. Latush, L.T.; Rabkin, L.M.; Torgashev, V.I.; Yuzyuk, Yu.I.; Shuvalov, L.A. (). Raman spectra and phase transitions in group IV crystals of the NaK(1-x)[NH₄]_xC₄H₄O₆ 4H₂O system. IANFA, no. 2, 1985, 360-364. (RZFZA, 86/6L383).
829. Leonov, B.A.; Malashonok, V.A.; Puko, R.A.; Skripnik, N.A.; Shedenkov, S.I. (). Nonlinear processes in intracavity laser spectroscopy. VNIILChV. Sbornik nauchnykh trudov, no. 29, 1985, 104-109. (RZFZA, 86/6L1179).
730. Luk'yanenko, S.F.; Solodov, A.M. (). Using c-w tunable lasers in high-resolution intracavity spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 208-212.
731. Makarov, A.A.; Tyakht, V.V. (). IR absorption spectrum of highly excited molecules: corelation effects and relationship to intramolecular relaxation times. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 12-17.
732. Makushkin, Yu.S.; Petrova, A.I.; Stroynova, V.N.; Bykov, A.D. (). Calculating the halfwidth of H₂O spectral lines in the microwave and IR. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 280-284.
733. Marinyuk, V.V. (NIFKhI). Relationship between Raman scattering intensified by adsorption and optical absorption on a silver surface in the presence of adsorbed atoms. ELKKA, no. 5, 1986, 679-682.
734. Meleshkin, A.V.; Gorokhovskiy, A.V.; Lipovskiy, I.M.; Rikhter, L.Ya.; Surkin, R.I. (). Determining the absolute integral band intensities in laser-excited IR fluorescence spectra. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 144-146.
735. Nagli, L.Ye.; Stan'ko, N.G. (). Spectroscopy of upper excited states of Tl^(sup+) ions in KCl-Tl. OPSPA, vol. 60, no. 6, 1986, 1292-1294.
736. Nakhutin, I.Ye.; Poluektov, P.P.; Timonin, V.V. (). Calibration of laser spectrometers of aerosols. ZPSBA, v. 44, no. 5, 1986, 753-757.

737. Petrov, V.I. (). Effect of intermediate vibronic states on inelastic three-photon scattering spectra. OPSPA, v. 59, no. 6, 1985, 1315-1320.
738. Pirags, M.Ya.; Auzin'sh, M.P.; Ferber, R.S. (). Experimental studies on the fluorescence spectra of He-Ne laser-excited K₂ molecules. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 128-132.
739. Potapov, S.K. (). Ultrahigh-resolution anti-Stokes Raman spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 171-175.
740. Puko, R.A.; Malashonok, V.A.; Mit'kina, N.N.; Razvina, T.I.; Verenik, V.N. (). Application of an intracavity laser spectroscopy method for the resolution of absorption spectra structure of rare-earth ions in condensed media. ZPSBA, v. 44, no. 6, 1986, 1033.
741. Rebane, I. (). Photochemical spectral hole burning by short pulses. ETFMB, no. 4, 1985, 438-440. (RZFZA, 86/6L1204).
742. Rodionov, G.D.; Saprykin, E.G. (). Forming of difference resonances by means of a polarization prism. AVMEB, no 6, 1985, 95-98.
743. Sapozhnikov, M.N. (NIIBIKhS). Model calculations of hole burning in the absorption spectra of complex molecules in inhomogeneous matrices: dependence of the shape of the dip on frequency and time of hole burning. FTVTA, no. 6, 1986, 1904-1907.
744. Semenkovich, G.V.; Strokach, N.S.; Shigorin, D.N. (NIFKHI). Study on intramolecular vibrations of aromatic aldehydes and ketones in the ground electron state. Part 1. Vibrational spectra of 2-naphthaldehyde in polarized and natural light. ZFKHA, no. 6, 1986, 1442-1447.
745. Serzhantov, V.G.; Surkina, R.Kh.; Surkin, R.I. (). Resonant Raman spectrum of iodine vapor. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 79-81.
746. Shumay, I.L.; Zadkov, V.N.; Heinzen, D.J.; Cash, M.M.; Feld, M.S. (last three from MIT, Boston). (MGU). Observation of the saturation effect in c-w active spectroscopy of liquid nitrogen. IANFA, no. 6, 1986, 1202-1205.

747. Sinitsa, L.N.; Tsyganova, Ye.V. (). Intracavity double optical resonance spectroscopy. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 118-120.
748. Smirnov, V.A. (). Errors in photometric measurements by a high-resolution raster spectrometer. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 312.
749. Smolenskiy, G.A.; Kolpakova, N.N.; Sher, Ye.S.; Brzhezina, B. (Czech). (FTI). Anomalous behavior of soft mode damping in an unmatched phase in Cd₂Nb₂O₇, K₂SeO₄, and Rb₂ZnBr₄. FTVTA, no. 5, 1986, 1417-1424.
750. Surkin, R.I.; Serzhantov, V.G.; Sverdlov, L.M. (). Raman spectrum analysis of propylene and ethylene under excitation at 266 nm. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 141-143.
751. Tkachuk, A.M.; Klokishner, S.I.; Petrov, M.V. (). Interionic interaction in an alpha-beta-SrF₂-2YF₃ system and kinetics of the population of the holmium ⁵I₇ term. OPSPA, vol. 60, no. 5, 1986, 983-992.
752. Torgashev, V.I.; Yuzyuk, Yu.I.; Smutnyy, F.; Polomska, M. (NIIFRGU). Raman scattering spectra and a high-temperature ferroelectric phase transition in LiN[H_xD_{1-x}]₄SO₄. FTVTA, no. 6, 1986, 1675-1682.
753. Trifonov, N.Yu. (). Resonant Raman spectrum analysis: intensity of higher excitations and composite frequencies. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 14-18.
754. Turyanitsa, I.D.; Vodop'yanov, L.K.; Rubish, V.M.; Kengerlinskiy, L.Yu.; Dobosh, M.V. (). Raman spectra and dielectric properties of Sb-S-I glasses. ZPSBA, v. 44, no. 5, 1986, 798-802.
755. Vandysheva, G.A.; Luk'yanenko, S.F.; Makogon, M.M.; Serdyukov, V.I.; Sinitsa, L.N. (). Intracavity laser spectrometer with negative feedback. CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 300-303.
756. Vovk, S.M.; Sharygin, L.M.; Bobovich, Ya.S.; Gonchar, V.F.; Loguntsev, Ye.N. (). Dimensional effects in Raman spectra of hydrous tin dioxide. ZPSBA, v. 44, no. 6, 1986, 974-977.

757. Yegorov, V.K.; Zasavitskiy, I.I.; Kachanovskiy, A.Ye.;
Maslov, A.V.; Mershavka, V.K.; Shotov, A.P. ().
Measuring the absorption of molecular gases by c-w
injection lasers. CVSMSVSR, 7th, Tomsk, 16-27 Jun
1985. Trudy. Part 2. Tomsk, 1986, 127-131.
758. Yegorov, V.K.; Zasavitskiy, I.I.; Kachanovskiy, A.Ye.;
Maslov, V.A.; Mershavka, V.K.; Shotov, A.P. (). IR
gas analyzer based on c-w injection lasers. CVSMSVSR,
7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk,
1986, 183-187.
759. Yevseyev, I.V.; Ivliyev, S.V. (). Identification of
vibrational-rotational molecular transitions by
polarization echo spectroscopy. CVSMSVSR, 7th, Tomsk,
16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986, 222-226.
760. Yevstaf'yev, V.V.; Smirnov, V.A. (). Improving the
calibration accuracy of a wavelength scale for a
high-resolution spectrometer. CVSMSVSR, 7th, Tomsk,
16-27 Jun 1985. Trudy. Part 3. Tomsk, 1986, 307-311.
761. Zakharov, A.V.; Madvaliyev, U.; Slepchenko, G.N. ().
Photoacoustic effect during the nonsinusoidal
modulation of light. OPSPA, vol. 60, no. 5, 1986,
1023-1025.
762. Zasavitskiy, I.I.; Kosichkin, Yu.V.; Kuznetsov, A.I.;
Nadezhdinskiy, A.I.; Stepanov, Ye.V.; Shotov, A.P.
(). Diode laser spectroscopy of collisional line
broadening in polyatomic molecules. CVSMSVSR, 7th,
Tomsk, 16-27 Jun 1985. Trudy. Part 2. Tomsk, 1986,
138-142.
763. Zotov, O.V.; Makarov, V.S.; Moskalenko, N.I. ().
Study on IR absorption spectra of isotopic varieties
of water vapor at elevated temperatures. CVSMSVSR,
7th, Tomsk, 16-27 Jun 1985. Trudy. Part 3. Tomsk,
1986, 108-111.

J. BEAM-TARGET INTERACTION

1. Miscellaneous Targets

764. Abduragimov, G.A.; Meylanov, R.P.; Ugay, Ya.A. (DagGPI). Temperature distribution on the surface of a crystal during the local pulsed liberation of heat. INFZA, vol. 50, no. 6, 1986, 1013-1017.
765. Andreyev, A.V.; Akhmanov, S.A.; Ponomarev, Yu.V. (MGU). Scattering of x-rays by an inhomogeneous [laser-irradiated] surface under conditions of total internal reflection. IANFA, no. 6, 1986, 1206-1213.
766. Anisimov, V.N.; Kozolupenko, V.P.; Sebrant, A.Yu. (IAE). Formation of surface periodic structures on film coatings. KVEKA, no. 6, 1986, 1289-1292.
767. Bagmut, A.G.; Sokol, A.A. (). Structure and morphology of metal and semiconductor films deposited in the zone of interaction of laser radiation and a substrate. PFKMD, no. 11, 1985, 54-57. (RZFZA, 86/5Ye1097).
768. Birjega, M.I.; Zberea, I.; Popescu-Pogrion, N. (). Transmission electron microscopy and electron diffraction study on [CO₂ laser-irradiated] gamma-Cr_{(sub2)O_(sub3)} and alpha-Cr_{(sub2)O_(sub3)} particles (in English). RRPQA, no. 9, 1985, 763-767. (RZFZA, 86/6Ye1167).
769. Bugayev, A.A.; Zakharchenya, B.P.; Ivanov, M.G.; Merkulov, I.A. (FTI). formation of cellular structures on the surface of silicon under picosecond light action. FTVTA, no. 5, 1986, 1484-1488.
770. Bugayev, A.A.; Zakharchenya, B.P.; Lukoshkin, V.A. (FTI). Generation of small-scale relief structures on a silicon surface under picosecond action. PZTFD, no. 12, 1986, 710-713.
771. Bychkov, S.G.; Biketov, A.A.; Ramazanova, N.A.; Kim, B.G.; Ksandopulo, G.I. (KazGU). Relationship of pulse efficiency and radiation energy during the laser erosion of epoxy resins. KHFID, no. 5, 1986, 707-708.
772. Chmel', A.Ye.; Kondyrev, A.M.; Smirnova, Z.A. (). Effect of the molecular mass of polymers on their resistance to the action of laser radiation. VYSAA, v. A28, no. 2, 1986, 251-253. (RZFZA, 86/6Ye1164).

773. Dikhtiyevskiy, O.V.; Martynenko, O.G.; Pavlyukevich, N.V.; Shabunya, S.I. (). Thermoelastic loading of a plate by a periodic pulsed flux of radiation. VAFEA, no. 4, 1985, 79-85. (RZFZA, 86/5Ye1083).
774. Fedoseyev, S.A. (). Switching effect in metal--tunnel-dielectric--semiconductor structures. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 128-132.
775. Graichen, H.; Wolf, R.; Koehler, Th.; Zscherpe, G. (). Modification of contact layers by laser. FGRTA, no. 2, 1986, 78-81. (RZRAB, 86/6Ye634).
776. Grigorov, L.N. (ISPM). Mechanothermal desorption of macromolecules into the gas phase. DANKA, vol. 288, no. 6, 1986, 1393-1397.
777. Grigorov, L.N.; Chvanov, D.V. (ISPM). Laser-induced desorption of superheavy polymer ions. DANKA, vol. 288, no. 3, 1986, 654-656.
778. Kahlert, V. (). Device for surface scanning by a laser beam. Patent GDR, no. 226401, 21 Aug 1985. (RZRAB, 86/5Ye190).
779. Kuklev, Yu.I.; Uglov, A.A. (GNIIKhTES). Thermal action of IR laser radiation on translucent media. ONIITEkhim. Deposit, no. 187-KhP, 30 Jan 1986, 11 p. (RZFZA, 86/5L1266).
780. Levdanskiy, V.V. (ITMO). Effect of an electrical field on the flow of rarefied gases in capillaries. ZFKHA, no. 5, 1986, 1269-1271.
781. Manenkov, A.A.; Prokhorov, A.M. (). Laser damage to transparent solids. UFNAA, v. 148, no. 1, 1986, 179-211. (RZRAB, 86/6Ye706).
782. Nowak, S.; Gola, E. (). Effect of laser trimming on the stability of thick film resistors (in English). PNITB, no. 30, 1985, 73-76. (RZRAB, 86/5Ye613).
783. Pristrem, A.M.; Demchuk, A.V.; Danilovich, N.I. (MRI). Local initiation of a molten phase under the pulsed laser annealing of silicon. ZTEFA, no. 6, 1986, 1220-1224.

784. Rodin, P.R. (book reviewer); Kovalenko, V.S.; Kotlyarov, V.P.; Dyatel, V.P.; Golovko, L.F.; Romanenko, V.V. (authors of reviewed book). (). Review of book: Spravochnik po tekhnologii lazernoy obrabotki (Handbook on the technology of laser processing), Kiyev, Tekhnika, 1985, 168 p. EOBMA, no. 3, 1986, 85-86.
785. Seleznev, B.I.; Tkal', V.A.; Yemel'yanova, G.M. (NovgPI). IR spectrum analysis of structural reconstructions in laser-irradiated silicon dioxide films. VINITI. Deposit, no. 8930-V, 26 Dec 1985, 24 p. (RZFZA, 86/6Yell70).
786. Ugay, Ya.A.; Khoviv, A.M.; Nazarenko, I.N.; Dubov, S.I. (VGU). Increasing the rate of oxidation under the action of laser radiation on silicon. ZFKHA, no. 6, 1986, 1554-1556.
787. Vorob'yev, V.S. (IVTAN). Mechanism of absorbtion of laser radiation in a molecular vapor jet. TVYTA, no. 3, 1986, 609-612.
788. Yemel'yanov, V.I.; Seminogov, V.N. (). Theory of the generation of small-scale and "double" modulations of surface relief in media under the action of high-power electromagnetic radiation. PFKMD, no. 11, 1985, 145-149. (RZFZA, 86/5Yel082).
789. Yeremeyeva, Ye.P.; Votinov, M.P.; Dokukina, A.F.; Ovchinnikov, V.M.; Smirnova, Z.A. (GOI). Effect of low-molecular additives on the radiation resistance of transparent polymers. OPMPA, no. 6, 1986, 48-50.

2. Metal Targets

790. Alimov, D.T.; Yedvabnyy, I.V.; Khabibullayev, P.K. (). Reduction of metal oxides under laser heating. FKOMA, no. 3, 1986, 10-13.
791. Anisimov, V.N.; Baranov, V.Yu.; Vladimirtseva, L.A.; Kopetskiy, Ch.V.; Kravoshin, V.S.; Malyuta, D.D.; Pis'menny, V.D.; Serbrant, A.Yu.; Shakhlevich, K.V. (IPTMOM; IAE). Metastable phase formation during the laser irradiation of nickel in a carbon-containing environment. DANKA, vol. 288, no. 4, 1986, 866-869.
792. Basharin, A.Yu.; Osipov, O.I. (IVTAN). Study on surface temperature changes of metal products under laser heating. TVYTA, no. 3, 1986, 612-614.

793. Bertyayev, B.I.; Zavestovskaya, I.N.; Igoshin, V.I. (). Comparative analysis of two and three step thermal cycles during the laser surface quenching-hardening of steel. FKOMA, no. 3, 1986, 88-95.
794. Bonch-Bruyevich, A.M.; Kalabushkin, O.I.; Kaporskii, L.N.; Libenson, M.N.; Minayev, S.M.; Salyadinov, V.S. (). Kinetics of self-sustaining oxidation of titanium plates in a gas flow. PZTFD, no. 12, 1986, 714-718.
795. Borodina, G.G.; Kraposhin, V.S.; Kurochkin, Yu.V.; Stepanov, V.V. (). Effect of laser surface hardening on the fatigue strength of steel. PFKMD, no. 1, 1986, 123-127. (RZRAB, 86/5Ye606).
796. Bunkin, F.V.; Kirichenko, N.A.; Luk'yanchuk, B.S.; Morozova, Ye.A.; Morozov, Yu.Yu.; Simakin, A.V. (IOF). Metal ignition in air upon exposure to continuous wave laser radiation. KVEKA, no. 6, 1986, 1227-1234.
797. Bunkin, F.V.; Kirichenko, N.A.; Morozov, Yu.Yu. (IOF). Laser heating and metal burning upon oblique radiation incidence. KVEKA, no. 5, 1986, 993-998.
798. Danileyko, Yu.K.; Ivanov, A.D.; Kozikov, V.A.; Prokhorov, A.M.; Pchelintsev, A.I.; Sorokin, V.N.; Kholodenko, E.B. (IOF; GAZ). Industrial unit using YAG:Nd³⁺ lasers. KVEKA, no. 5, 1986, 1087.
799. Goncharov, V.K.; Karaban', V.I.; Ostrometskiy, V.A. (NIIPFP). Laser radiation shielding by damage products of various metals. KVEKA, no. 6, 1986, 1235-1240.
800. Isavediyev, A.A.; Malkhozov, M.F. (). Effect of laser waves on the surface radiation from metals in the infrared. PFKMD, no. 2, 1986, 5-9. (RZFZA, 86/6L1154).
801. Izmaylov, Ye.A.; Gorbach, V.G.; Gorbaneva, I.I. (). Austenizing of cast iron under the action of pulsed laser radiation. IZNMA, no. 3, 1986, 137-140.
802. Kogan, A.N.; Mirkin, L.I.; Tikhononva, N.P. (). Monte Carlo method of the formation of a structure of thin layers during laser metal sputtering. FKOMA, no. 3, 1986, 52-56.

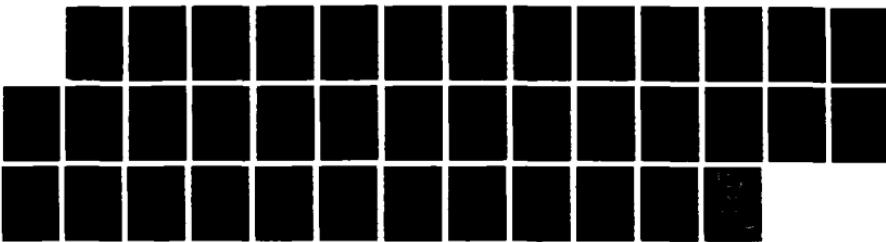
803. Korlyakov, V.K.; Solodyankin, V.V.; Bulatov, Ye.I.; Kordyukov, N.I. (). Automatic device for acoustic quality control of pulsed laser welding. DEFKA, no. 11, 1985, 80-81. (RZRAB, 86/5Ye602).
804. Kovalenko, V.S.; Vayner, G.M.; Golovko, L.F. (). Effect of c-w laser radiation on the structure and properties of titanium alloys. EOBMA, no. 3, 1986, 15-17.
805. Kurichenko, A.L.; Ivliyev, A.D.; Zinov'yev, V.Ye. (SGI). Study on the thermal properties of rare-earth metals using modulated laser radiation. TVYTA, no. 3, 1986, 493-499.
806. Manokhin, A.I.; Uglov, A.A.; Gorbach, A.F.; Smurov, I.Yu.; Mirkin, L.I. (IMET). Laser-plasma synthesis of carbide refractory alloys in carbon-containing media. DANKA, vol. 288, no. 3, 1986, 625-628.
807. Poletika, I.M.; Borisov, M.D.; Gladyshev, S.A.; Svirchev, N.Ye.; Proshkin, V.V.; Mikhlyayeva, N.V.; Sukhovarov, V.F. (). Alloying of low-carbon steel with the aid of high intensity sources. FKOMA, no. 3, 1986, 135-138.
808. Poyurovskaya, I.Ye.; Men Chun Von (OGU). Action of intense radiation on metals under rapid forced air cooling. PZTFD, no. 10, 1986, 582-586.
809. Shirokanov, A.D.; Yankovskiy, A.A. (). Destruction of metals under the action of laser pulses of microsecond duration. ZPSBA, v. 44, no. 6, 1986, 929-932.
810. Tutunaru, M.; Steimbrecher, G.; Mihailescu, I.N. (). Temperature field inside a metal sample subjected to high-power c-w laser irradiation (in English). RRPQA, no. 9, 1985, 789-792. (RZFZA, 86/6Yell73).
811. Uglov, A.A.; Smurov, I.Yu.; Ignat'yev, M.B.; Mirkin, L.I.; Krapivin, L.L. (). Calculation of fusion processes during the laser-plasma synthesis of metal nitrides in a nitrogen atmosphere at an elevated pressure. FKOMA, no. 3, 1986, 18-20.
812. Vorob'yev, V.S.; Maksimenko, S.V.; Khomkar, A. (IVTAN). Kinetics of metal vapor breakdown by beam in an atmosphere of atomic gas. FIZIKA, 1986, 714-720.

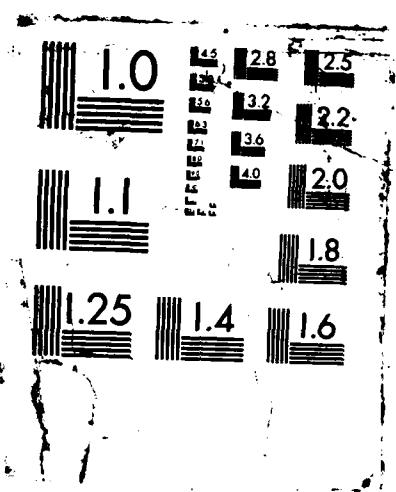
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DC DIRECTORATE FOR SCI. SEP 87 DIA-DST-27002-007-87

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3. Dielectric Targets

813. Abdupatayev, R.; Bedilov, M.R. (IYaFANUz). Laser damage to silicate glasses and generation of a multielement plasma. IYaFANUz. Preprint, no. R-6-192, 1985, 13 p. (RZFZA, 86/6Yell65).
814. Buzhinskiy, I.M.; Pozdnyakov, A.Ye. (GOI). Probability of destruction of optical glass in wide laser beams. OPMPA, no. 5, 1986, 24-25.
815. Kask, N.Ye.; Kovalev, M.A.; Fedorov, G.M.; Choporniyak, D.B. (NIIYaF). Initial stage of laser damage to glass by optical and microwave methods. KVEKA, no. 6, 1986, 1180-1184.
816. Tribel'skiy, M.I. (NIOPIK). Optical breakdown of dielectrics by a determined non-equilibrium variation in their optical characteristics in the vicinity of an absorbing switch. ZTEFA, no. 5, 1986, 831-838.
817. Voicu, L.; Stamatescu, L.; Hening, Al.; Raetchi, V.; Mihailescu, I.N.; Nanu, L. (). Signals generated by lead zirconium titanate (PZT) ceramics when irradiated by microsecond pulsed TEA-CO₂ laser pulses (in English). PSSAB, v. A91, no. 2, 1985, K103-K106. (RZFZA, 86/6L1161).

4. Semiconductor Targets

818. Arutyunov, Ye.N.; Vasil'yev, A.N.; Karpov, S.Yu.; Koval'chuk, Yu.V.; Myachin, V.Ye.; Pogorel'skiy, Yu.V. (). Study on luminescence properties of A^{(sup)3}B^{(sup)5} semiconductors after laser processing. Neravnovesnyye protsessy v poluprovodnikakh (Nonequilibrium processes in semiconductors). FTI. Leningrad, 1986, 180-201.
819. Balandin, V.Yu.; Dvurechenskiy, A.V.; Aleksandrov, L.N. (). Modeling of structural transformations in amorphous silicon layers under pulsed heating. PFKMD, no. 1, 1986, 53-60. (RZFZA, 86/6Yell71).
820. Blokh, M.D.; Magarill, L.I.; Saptsov, V.I.; Skok, E.M. (IFPSOAN). Study on two-phonon magnetic resonance of acoustic phonons in semiconductors. FTVTA, no. 5, 1986, 1470-1478.

821. Budyanyu, V.A.; Damaskin, I.A.; Zenchenko, V.P.; Nasakin, A.A.; Pyshkin, S.L.; Fedoseyev, S.A.; Chechuy, S.N. (). Obtaining film structures from a laser erosion plasma. Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh sistemakh. IPFANM. Kishinev, Shtiintsa, 1986, 113-128.
822. Demchuk, A.V.; Kazyuchints, N.M.; Pristrem, A.M.; Danilovich, N.I.; Patrin, A.A. (). Photoluminescent investigation of dislocation structure formation in silicon under the action of scanning laser radiation. ZPSBA, v. 44, no. 5, 1986, 776-780.
823. Gromov, G.G.; Ufimtsev, V.B.; Rudenko, K.V. (). Topography of periodic structures on the surface of indium antimonide. PFKMD, no. 12, 1985, 80-86. (RZFZA, 86/6Yel172).
824. Gromov, G.G.; Zhuk, S.V.; Ufimtsev, V.B. (MITKht). Numerical modeling of the action of pulsed laser radiation on semiconductors. ONIITEKhim. Deposit, no. 189-KhP, 30 Jan 1986, 27 p. (RZFZA, 86/6L1151).
825. Korshunov, A.B.; Gas'kov, A.M. (). Possible mechanism of laser p-n conversion at the surface of indium antimonide. PFKMD, no. 1, 1986, 61-69. (RZFZA, 86/5Yel093).
826. Leyderman, A.Yu.; Karageorgiy-Alkalayev, P.M. (). Processes of photostimulated cluster formation in semiconductors with impurity-defect interaction. DANUA, no. 9, 1985, 21-23. (RZFZA, 86/5Yel086).
827. Varshava, S.S.; Pelekh, L.N. (LvPI). Effect of laser irradiation on the electric properties of Si and GaAs whiskers. UkrNIINTI. Deposit, no. 2677-Uk, 5 Dec 1985, 10 p. (RZFZA, 86/6L1152).
828. Yemel'yanov, V.I.; Uvarova, I.F. (MGU). Nonlinear optical deformation of an acoustic subsystem and ultrafast melting of the surface of semiconductors by short laser pulses. IANFA, no. 6, 1986, 1214-1219.

K. PLASMA GENERATION AND DIAGNOSTICS

829. Balandikov, A.N.; Beznogikh, Yu.D.; Volkov, V.I.; Govorov, A.I.; Zabolotin, V.P.; Zinov'yev, L.P.; Isayev, A.S.; Karpov, I.I.; Kulikov, I.I.; Makarov, L.G.; Monchinskiy, V.A.; Perfeyev, V.N.; Pikan, A.I.; Seleznev, V.V.; Semenyushkin, I.N.; Fedukov, S.V.; Sherstyanov, D.I.; Chernikov, V.I. (OIYaI). Synchrophasotron at the Joint Institute of Nuclear Research. Work and completion, July-December 1984. OIYaI. Soobshcheniye, no. 9-85-511, 1985, 12 p. (RZFZA, 86/6V483).
830. Basov, N.G.; Grasyuk, A.Z.; Losev, L.L.; Meshalkin, Ye.A. (FIAN). Laser plasma detection. IANFA, no. 6, 1986, 1087-1094.
831. Basov, N.G.; Sklizkov, G.V.; Brunner, W.; Junge, K. (). Study on laser plasmas for nuclear fusion (in German). ANPYA, no. 4-6, 1985, 394-408. (RZFZA, 86/6G123).
832. Borovskiy, A.V.; Korobkin, V.V.; Mukhtarov, Ch.K. (IOF). Analytical theory of gain in the far UV greater than 50 nm at transitions of H ions in a freely disintegrating plasma. IANFA, no. 6, 1986, 1158-1166.
833. Bozhokin, S.V.; Choban, E.A. (LPI). Calculation of the speed of a thermonuclear reaction in a high-temperature plasma. ZTEFA, no. 5, 1986, 966-968.
834. Brunov, V.V.; Gorbunov, A.A.; Konov, V.I. (). Spectrum analysis of the initial stage of optical breakdown near a solid surface. ZPSBA, v. 44, no. 5, 1986, 845-849.
835. Bryunetkin, B.A.; Derzhiyev, V.I.; Dyakin, V.M.; Mayorov, S.A.; Yakovlenko, S.I. (VNIFTRI). Observation of lasing during a 4f-5g transition at 253 NM of a Be IV ion in a recombined laser plasma. PZTFD, no. 10, 1986, 613-617.
836. Bunkin, F.F.; Derzhiyev, V.I.; Karalin, A.V.; Nefedov, A.L.; Subbotin, V.I.; Kharitonov, V.V.; Chikin, K.R.; Yakovlenko, S.I. (IOF). Steady-state reactor-laser with surface pumping. IOF. Preprint, no. 321, 1985, 54 p. (RZFZA, 86/6L932).

837. Dick, M.; Fedotov, S.I.; Foerster, E.; Goetz, K.; Hegner, M.; Kalashnikov, M.P.; Koch, R.; Mikhaylov, Yu.A.; Neumann, N.; Nickles, P.V.; Rode, A.V.; Schafer, K.; Sklizkov, G.V.; Sommer, G.; Zimmer, W.D. (). X-ray spectroscopy and microscopy of laser-produced thermonuclear plasmas (in English). X 84. International Conference on X-Ray and Inner-Shell Process--Atoms, Molecules and Solids, Leipzig, 20-24 Aug 1984. Conference Proceedings. Leipzig, 1984, 155-163. (RZFZA, 86/6G138).
838. Golubev, A.A.; Latyshev, S.V.; Rudskoy, I.V.; Sharkov, B.Yu. (). Effect of triple recombination on the charged composition and temperature of a spreading laser plasma. PZTFD, no. 9, 1986, 513-516.
839. Gus'kov, S.Yu.; Lebo, I.G.; Rzanov, V.B.; Trebuleva, L.Ye. (FIAN). Solving the kinetic equation for alpha particles in laser targets, allowing for spontaneous magnetic fields. FIAN. Preprint, no. 24, 1986, 47 p. (RZFZA, 86/6G273).
840. Iova, I.; Chera, I. (). Effects of the interaction between He-Ne laser radiation and a hollow cathode plasma (in English). RRPQA, no. 9, 1985, 745-753. (RZFZA, 86/6G346).
841. Karlov, N.V.; Kononov, N.N.; Kuz'min, G.P.; Nesterenko, A.A.; Toker, G.R. (IOF). Supersonic turbulent regime of the propagation of an optical discharge. PZTFD, no. 9, 1986, 570-575.
842. Korobkin, V.V.; Marin, M.Yu.; Pil'skiy, V.I.; Polonskiy, L.Ya.; Pyatnitskiy, L.N.; Reyngol'd, A.V. (IVTAN). Physical properties and laws governing the development of continuous extended laser sparks. IVTAN. Preprint, no. 5/179, 1985, 36 p. (RZFZA, 86/5L1261).
843. Latyshev, S.V.; Rudskoy, I.V. (ITEF). Temperature of a plasma under quasi-steady-state laser heating. ITEF. Preprint, no. 2, 1986, 14 p. (RZFZA, 86/5G94).
844. Lominadze, Dzh.G.; Tsikarishvili, E.G.; Moiseyev, S.S. (). Role of relativistic effects in the absorption of high-power laser radiation by a plasma. Problemy nelineynykh i turbulentnykh protsessov v fizike. Mezhdunarodnaya rabochaya gruppa, 2nd, Kiyev, 1983. Trudy. Part 1. Kiyev, Naukova dumka, 1985, 366-368. (RZFZA, 86/6G124).

845. Mazing, M.A.; Panin, A.M.; Shevel'ko, A.P. (). Spectra of Ca XIX and Ti XXI helium-like ions in a laser plasma. OPSPA, vol. 60, no. 5, 1986, 910-915.
846. Meyyerovich, B.E. (IFP). Enroute to the achievement of electromagnetic collapse. UFNAA, vol. 149, no. 2, 1986, 221-257.
847. Motylev, S.L. (IOF). Generation of eddies and spontaneous magnetic fields in a laser plasma. IOF. Preprint, no. 27, 1986, 13 p. (RZFZA, 86/6G122).
848. Silant'yev, A.Yu. (). Numerical solution of the problem on the interaction between laser radiation and a c-w optical discharge plasma. Elementarnyye protsessy v khimicheski reagiruyushchikh sredakh. Moskva, 1985, 52-55. (RZFZA, 86/5G342).
849. Silant'yev, A.Yu. (). Flow rate of a gas in a laser plasmatron. Elementarnyye protsessy v khimicheski reagiruyushchikh sredakh. Moskva, 1985, 56-58. (RZFZA, 86/5G425).
850. Vasil'yev, B.I.; Grasyuk, A.Z.; Losev, L.L.; Meshalkin, Ye.A. (FIAN). Dynamics of the change in voltage of a charged target under the influence of a laser plasma. ZTEFA, no. 5, 1986, 873-877.
851. Vasil'yev, B.I.; Grasyuk, A.Z.; Losev, L.L.; Meshalkin, Ye.A. (FIAN). Laser-plasma detection. ZETFA, vol. 90, no. 5, 1986, 1635-1645.
852. Zakharchenko, S.V.; Semenov, L.P.; Sintyurin, G.A. (IEM). Optical discharge in decreased-density air with solid impurities. KVEKA, no. 5, 1986, 1040-1042.
853. Zaydel', A.N. (FTI). The use of holographic interferometry for plasma diagnostics. UFNAA, vol. 149, no. 1, 1986, 105-138.

III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS

854. Aleksandrov, L.N.; Zolotkov, V.D.; Mordyuk, V.S. (). growth and radiation defects of luminophor crystals for light sources. Rostovyye i radiatsionnyye defekty kristallov lyuminoforov dlya istochnikov sveta. (RZFZA, 86/6Ye001).
855. Alferov, Zh.I.; Shmartsev, Yu.V. (eds). (). Photodetectors and photoconverters. Fotopriyemniki i fotopreobrazovateli. FTI. Leningrad, Nauka, 1986, 296 p.
856. All-Union Conference on Coherent and Nonlinear Optics, 12th, Moscow, 26-29 Aug 1985. Summaries of the reports. Parts 1 and 2. CVKKNOpt, 12th, Moskva, 26-29 Aug 1985. Tezisy dokladov. Moskva, 1985. Chast' 1, 431 p. Chast' 2, 418 p. (RZRAB, 86/6Ye5-6).
857. Bakirov, M.Ya. (). Electronic instruments based on Ge-Si solid solutions. Elektronnyye pribory na osnove tverdogo rastvora Ge-Si. Baku, Elm, 1986, 139 p. (RZFZA, 86/6N327).
858. Banakh, V.A.; Mironov, V.L. (auths); Zuyev, V.Ye. (ed). (IOA). Ranging propagation of laser radiation in a turbulent atmosphere. Lokatsionnoye rasprostraneniye lazernogo izlucheniya v turbulentnoy atmosfere. Novosibirsk, Nauka, 1986, 176 p.
859. Basov, N.G. (ed). (FIAN). Wavefront reversal of laser radiation. Obrashcheniye volnovogo fronta lazernogo izlucheniya. FIAN. Trudy, no. 172, Moskva, Nauka, 1986, 184 p.
860. Borodin, P.M.; Labzovskiy, L.N. (eds). (). Physical fundamentals of quantum radiophysics. Fizicheskiye osnovy kvantovoy radiofiziki. LGU. Leningrad, 1985, 320 p. (RZFZA, 86/5Zh2).
861. Chetverushkin, B.N. (). Mathematical modeling of problems of the dynamics of a radiating gas. Matematicheskoye modelirovaniye zadach dinamiki izluchayushchego gaza. Moskva, Nauka, 1985, 304 p. (RZFZA, 86/5I36).

862. Davydov, A.S.; Chernousenko, V.M. (eds). (). Problems on nonlinear and turbulent processes in physics. International Working Group, 2nd, Kiev, 1983. Proceedings. Part 1. Problemy nelineynykh i turbulentnykh protsessov v fizike. Mezhdunarodnaya rabochaya gruppa, 2nd, Kiyev, 1983. Trudy. Chast' 1. Kiyev, Naukova dumka, 1985, 453 p. (RZFZA, 86/6G62).
863. Denisyuk, Yu.N. (ed). (). Optical holography with recording in three-dimensional media. Opticheskaya holografiya s zapis'yu v trekhmernykh sredakh. OOFA. NPGAN. Leningrad, Nauka, 1986, 112 p.
864. Gas lasers in metrology. Gazovyye lazery v metrologii. MIFI. Moskva, Energoatomizdat, 1986, 76 p. (RZFZA, 86/6L1222).
865. Gaysenok, V.A.; Sarzhevskiy, A.M. (). Anisotropy of absorption and luminescence in polyatomic molecules. Anizotropiya pogloshcheniya i lyuminestsentsii mnogoatomnykh molekul. Minsk, Universitetskoye, 1986, 318 p. (RZFZA, 86/6L75).
866. Information processing in communications systems. Obrabotka informatsii v sistemakh svyazi. EIS. Leningrad, 1985, 168 p. (RZFZA, 86/6Zh73).
867. Ismailov, I. (auth); Yeliseyev, P.G. (ed). (). Optoelectronic radiative instruments based on indium phosphide and related materials. Optoelektronnyye izluchatel'nyye pribory na osnove fosfida indiya i rodstvennykh materialov. FTIANTadzh. Dushanbe, Donish, 1986, 207 p.
868. Izvozchikov, V.A. (ed). (). Wideband semiconductors and dielectrics. Shirokozonnyye poluprovodniki i dielektriки. LGPI. Leningrad, 1985, 162 p. (RZFZA, 86/5N384).
869. Kaminskiy, A.A.; Aminov, L.K.; Yermolayev, V.L.; Korniyenko, A.A.; Kravchenko, V.B.; Malkin, B.Z.; Mill', B.V.; Perlin, Yu.Ye.; Petrosyan, A.G.; Pukhov, K.K.; Sakun, V.P.; Sarkisov, S.E.; Sveshnikova, Ye.B.; Skripko, G.A.; Starostin, N.V.; Shkadarevich, A.P. (auths); Kaminskiy, A.A. (ed). (). Physics and spectroscopy of laser crystals. Fizika i spektroskopiya lazernykh kristallov. IKAN. Moskva, Nauka, 1986, 272 p.
870. Kirillin, V.A. (). Pages from the history of science and technology. Stranitsy istorii nauki i tekhniki. Moskva, Nauka, 1986, 511 p. (RZFZA, 86/5A32).

871. Klyshko, D.N. (auth); Rukhadze, A.A. (ed). (). Physical fundamentals of quantum electronics. *Fizicheskiye osnovy kvantovoy elektroniki*. Moskva, Nauka, 1986, 296 p.
872. Kochanov, V.P. (ed). (). All-Union Symposium on Molecular Spectroscopy of High and Ultrahigh Resolution, 7th, Tomsk, 16-27 Jun 1985. Proceedings. Parts 1,2,3 . CVSMSVSR, 7th, Tomsk, 16-27 Jun 1985. Trudy. Tomsk, 1986. Chast' 1, 121 p. Chast' 2, 267 p. Chast' 3, 326 p.
873. Kochelap, V.A.; Pekar, S.I. (auths); Mashkevich, V.S. (ed). (). Theory of spontaneous and stimulated chemiluminescence in gases. *Teoriya spontannoy i stimulirovannoy khemilyuminestsentsii gazov*. IPANUK. Kiyev, Naukova dumka, 1986, 264 p.
874. Kovarskiy, V.A.; Sinyavskiy, E.P. (eds). (). Optical and kinetic effects in nonequilibrium electron and electron-vibrational systems. *Opticheskiye i kineticheskiye effekty v neravnovesnykh elektronnykh i elektron-kolebatel'nykh sistemakh*. IPFANM. Kishinev, Shtiintsa, 1986, 148 p.
875. Kulipanov, G.N. (ed). (). All-Union Conference on the Use of Synchrotron Radiation, 6th, Novosibirsk, 4-6 Jul 1984. Proceedings. CVSISIZl, 6th, 4-6 Jul 1984. Trudy. IYaFSOAN. Novosibirsk, 1984, 356 p. (RZFZA, 86/6V9).
876. Mezenov, A.V.; Soms, L.N.; Stepanov, A.I. (). Thermooptics of solid state lasers. *Termooptika tverdotel'nykh lazerov*. Leningrad, Mashinostroyeniye, 1986, 199 p.
877. Minogin, V.G.; Letokhov, V.S. (). Laser radiation pressure on atoms. Davleniye lazernogo izlucheniya na atomy. Series: Sovremennyye problemy fiziki (Current problems in physics). Moskva, Nauka, 1986, 224 p.
878. Photosensitive materials for photographic recording of optical information. *Svetochuvstvitel'nyye materialy dlya fotograficheskoy registratsii opticheskikh informatsii*. VGNIPIKFP. Moskva, 1985, 192 p. (RZFZA, 86/5L907).

879. Problems in measuring the frequency characteristics of laser radiation and their metrological provision. Voprosy izmereniya chastotnykh kharakteristik izlucheniya lazerov i ikh metrologicheskoye obespecheniye. VNIIIM. Leningrad, 1984, 86 p. (RZFZA, 86/5L1132).
880. Rykalin, N.N.; Uglov, A.A.; Anishchenko, L.M. (). High-temperature industrial processes. Thermophysical fundamentals. Vysokotemperaturnyye tekhnologicheskiye protsessy: Teplofizicheskiye osnovy. Moskva, Nauka, 1986, 172 p. (RZFZA, 86/5Ye10).
881. Sivukhin, D.V. (MFTI). General course on physics. Optics. Obshchiy kurs fiziki. Optika. 2nd edition, revised. Moskva, Nauka, 1985, 751 p. (RZFZA, 86/5A35).
882. Solomatin, V.A.; Shilin, V.A. (). Optoelectronic phase transducers. Fazovyye optiko-elektronnyye preobrazovateli. Series: Biblioteka priborostroitelya (Instrument maker's library). Moskva, Mashinostroyeniye, 1986, 145 p.
883. Ternov, I.M.; Mikhaylin, V.V.; Khalilov, V.R. (). Synchrotron radiation and its application. Sinkhrotronnoye izlucheniye i yego primeneniya. 2nd edition revised and enlarged. MGU. Moskva, 1985, 264 p. (RZFZA, 86/5A41).
884. Uldashev, B. (). Lazernoje izlucheniye. Laser radiation. Series: Besedy o naуke (Talks on science), no. 51. Tashkent, Uzbekistan, 1985, 24 p. (KNLTA, 18/86, 15973).
885. World Congress of IMEKO [Internationales Messtechnische Konföderation, International Measurement Confederation], 10th, Prague, 22-26 Apr 1985. (All in English). CWCIMEKO, 10th, Pr'aha, 22-26 Apr 1985. Preprints. Praha, Dum techn. CSVTS. Vol. 1, 256 p. (RZFZA, 86/6A33). Vol. 2, 168 p. (RZRAB, 86/6Ye6).
886. Zuyev, V.Ye.; Krekov, G.M. (). Optical models of the atmosphere. Current problems of atmospheric optics. Vol. 2. Opticheskiye modeli atmosfery. Sovremennyye problemy atmosfernoy optiki. Tom 2. Leningrad, Gidrometeoizdat, 1986, 256 p.

IV. SOURCE ABBREVIATIONS

(Note: CTC = cover-to-cover translation available)

AKZHA	Akusticheskiy zhurnal (CTC)
ANPYA	Annalen der Physik (Leipzig)
ARAKB	Archiwum akustyki (Warsaw)
ATPLB	Acta physica polonica. Series A
AVMEB	Avtometriya (CTC)
BWATA	Biuletyn Wojskowej akademii technicznej imeni Jarosława Dabrowskiego
CISHPMST	International Symposium: High-Purity Materials, Science and Technology
CIWKIILme	Internationales wissenschaftliches Kolloquium, Ilmenau
CMSPMEKZ	Mezhdunarodnyy seminar: Prochnost' materialov i elementov konstruktsiy pri zvukovykh chastotakh nagruzheniya
CVKKNOpt	Vsesoyuznaya konferentsiya po kogerentnoy i nelineynoy optike
CVSISIzl	Vsesoyuznoye soveshchaniye po ispol'zovaniyu sinkrotonnogo izlucheniya
CVSMSVSR	Vsesoyuznyy simpozium po molekulyarnoy spektroskopii vysokogo i sverkhvysokogo razresheniya
CWCIMEKO	World Congress of IMEKO [Internationale Messtechnische Konföderation, International Measurement Confederation]
CZYPA	Czechoslovak Journal of Physics
DANAA	Akademiya nauk Armyanskoy SSR. Doklady
DANKA	Akademiya nauk SSSR. Doklady (CTC)

DANUA	Akademiya nauk Uzbekskoy SSR. Doklady
DAZRA	Akademiya nauk Azerbaydzhanskoy SSR. Doklady
DEFKA	Defektoskopiya (CTC)
DUKAB	Akademiya nauk Ukrayns'koy RSR. Dopovidi. Seriya A. Fiziko-matematychni ta tekhnichni nauki
EKNTB	Elektronika (Warsaw)
ELKKA	Elektrokhimii (CTC)
EOBMA	Elektronnaya obrabotka materialov (CTC)
ETFMB	Akademiya nauk Estonskoy SSR. Izvestiya. Fizika, matematika
EXPPA	Eksperimentelle Technik der Physik
FGRTA	Feingeraetetechnik
FGVZA	Fizika goreniya i vzryva (CTC)
FIPLD	Fizika plazmy (Moskva, AN SSSR) (CTC)
FIZSA	Fizika v shkole
FKOMA	Fizika i khimiya obrabotki materialov
FNMKA	Finomechanika, mikrotehnika (Budapest)
FNTED	Fizika nizkikh temperatur (Kiев) (CTC)
FTPPA	Fizika i tekhnika poluprovodnikov (CTC)
FTVTA	Fizika tverdogo tela (CTC)
GTPZA	Gigiyena truda i professional'nyye zabolеваниya
IANFA	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya (CTC)
IFAOA	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana (CTC)
INFZA	Inzhenerno-fizicheskiy zhurnal (CTC)

IUZTA	Akademiya nauk Uzbekskoy SSR. Izvestiya. Seriya tekhnicheskikh nauk
IVNMA	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy (CTC)
IVUBA	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye (CTC)
IVUFA	Izvestiya vysshikh uchebnykh zavedeniy. Fizika (CTC)
IVUSA	Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye
IVUZB	Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVYRA	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika (CTC)
IVZAA	Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"zemka (CTC)
IZFMB	Akademiya nauk Moldavskoy SSR. Izvestiya. Seriya fiziko-tehnicheskikh i matematicheskikh nauk
IZNMA	Akademiya nauk SSSR. Izvestiya. Metally (CTC)
IZTEA	Izmeritel'naya tekhnika (CTC)
JMKOA	Jemna mechanika a optika
KHFID	Khimicheskaya fizika (CTC)
KHVKA	Khimiya vysokikh energiy (CTC)
KNLTA	Knizhnaya letopis'
KRISA	Kristallografiya (CTC)
KVEKA	Kvantovaya elektronika (journal, Moskva) (CTC)
LFSBA	Litovskiy fizicheskiy sbornik (CTC)
LZFTA	Akademiya nauk Latviyskoy SSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk
LZSTA	Letopis' zhurnal'nykh statey

MGTDA	Magyar tudomany
MTRLB	Metrologiya
NACHA	Nachrichtentechnik-Elektronik (GDR)
OKNOA	Okeanologiya (CTC)
OPAPB	Optica applicata (Poland)
OPMPA	Optiko-mekhanicheskaya promyshlennost' (CTC)
OPSPA	Optika i spektroskopiya (CTC)
OTIZD	Otkrytiya, izobreteniya (formerly included in OIPOB)
OTPIA	Otbor i peredacha informatsii. Fiziko-mekhanichekiy institut AN UkrSSR. Respublikanskiy mezhvedomstvennyy sbornik nauchnykh trudov. Kiyev, Naukova dumka
PFKMD	Poverkhnost'. Fizika, khimiya, mekhanika (Moskva)
PNITB	Prace naukowe Instytutu technologii elektronowej Politechniki wroclawskiej (Breslau)
PRTEA	Pribory i tekhnika eksperimenta (CTC)
PSSAB	Physica status solidi (A). Applied Research (GDR)
PSSBB	Physica status solidi (B). Basic Research (GDR)
PZTFD	Zhurnal tekhnicheskoy fiziki. Pis'ma (CTC)
RADID	Nauchnyye trudy vysshikh uchebnykh zavedeniy Litovskoy SSR. Radioelektronika (Kaunas)
RAELA	Radiotekhnika i elektronika (journal, Moskva) (CTC)
RATEA	Radiotekhnika (journal, Moskva) (CTC)
RELED	Radiotekhnika i elektronika (sbornik, Minsk)
RRPQA	Revue Roumaine de Physique

RZFZA	Referativnyy zhurnal. Fizika
RZGFA	Referativnyy zhurnal. Geofizika
RZRAB	Referativnyy zhurnal. Radiotekhnika
SAKNA	Akademiya nauk Gruzinskoy SSR. Soobshcheniya
SCEFA	Studii si cercetari de fizica
SLOZA	Slaboproudý obzor
SOMEA	Sovetskaya meditsina
SPBAA	Spisanie na Bulgarskata Akademiya na Naukite
TEHBA	Tehnika (Yugoslavia)
TKMSB	Tekhnicheska misul (Sofia)
TKTEA	Tekhnika kino i televideniya
TVYTA	Teplofizika vysokikh temperatur (CTC)
UFIZA	Ukrainskiy fizicheskiy zhurnal (Russian language version) (CTC)
UFNAA	Uspekhi fizicheskikh nauk (CTC)
VAFEA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-energeticheskikh nauk
VBMFA	Belorusskiy universitet. Vestnik. Seriya 1. Matematika, fizika, mehanika
VBSFA	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
VORLA	Vestnik otorinolaringologii
VYSAA	Vysokomolekulyarnyye soyedineniya. Seriya A (CTC)
WIFOA	Wissenschaft und Fortschritt (GDR)
ZETFA	Zhurnal eksperimental'noy i teoreticheskoy fiziki (CTC)

ZFKHA	Zhurnal fizicheskoy khimii (CTC)
ZFPRA	Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma (CTC)
ZNPFA	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii (CTC)
ZPMFA	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki (CTC)
ZPSBA	Zhurnal prikladnoy spektroskopii (CTC)
ZRBEA	Zarubezhnaya radioelektronika
ZTEFA	Zhurnal tekhnicheskoy fiziki (CTC)
ZUNBA	Zhurnal ushnykh, nosovykh i gorlovykh bolezney
ZVMFA	Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki (CTC)

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AKIN

Akusticheskiy institut AN SSSR
Acoustics Institute, Academy of Sciences USSR

API

Altayskiy politekhnicheskiy institut
Altay Polytechnical Institute, Barnaul

BashGU

Bashkirskiy gosudarstvennyy universitet
Bashkir State university

BashMI

Bashkirskiy meditsinskiy institut
Bashkir Medical Institute

BGU

Belorusskiy gos universitet
Belorussian State University

BPI

Belorusskiy politekhnicheskiy institut
Belorussian Polytechnical Institute, Minsk

ChPI

Chelyabinskiy politekhnicheskiy institut
Chelyabinsk Politechnical Institute

DagGPI

Dagestanskiy Gosudarstvennyy Pedagogicheskiy Institut
Dagestan State Pedagogical Institute

DGU

Dnepropetrovskiy gosudarstvennyy universitet
Dnepropetrovsk State University

EIS

Elektrotekhnicheskiy institut svyazi
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FMIANUkr

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FTI

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FTIANTadzh

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Physicotechnical Institute, Academy of Sciences
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FTIANUK
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FTINT
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Physicotechnical Institute of Low Temperature Physics,
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GAZ
Gor'kovskiy avtomobil'niy zavod
Gor'kiy Automobile Plant

GGU
Gor'kovskiy gos universitet
Gor'kiy State University

GIFTI
Gor'kovskiy issledovatel'skiy fiziko-tehnicheskiy
institut pri Gor'kovskom gos universite
Gor'kiy Physicotechnical Research Institute at
Gor'kiy State University

GNIIKhTES
Gos NII khimii i tekhnologii elementoorganicheskikh
soyedineniy
State Scientific Research Institute of Chemistry and
Technology of Organoelemental Compounds

GOI
Gosudarstvennyy opticheskiy institut im Vavilova
State Optical Institute imeni Vavilov, Leningrad

IAE
Institut atomnoy energii im Kurchatova
Institute of Atomic Energy imeni Kurchatov, Moscow

IAESOAN
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IBFiz
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Institut of Biological Physics, Academy of Sciences
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IELAN
Institut elektrokhimii AN SSSR
Institute of Electrochemistry, Academy of Sciences
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IEM
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IFANAZ
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IFANB

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IFANEst

Institut fiziki AN EstSSR
Institute of Physics, Academy of Sciences Estonian SSR

IFANUk

Institut fiziki AN UkrSSR
Institute of Physics, Academy of Sciences Ukrainian SSR,
Kiev

IFI

Institut fizicheskikh issledovaniy AN ArmSSR
Institute of Physics Research, Academy of Sciences
Armenian SSR

IPF

Institut fizicheskikh problem AN SSSR
Institute of Problems of Physics, Academy of
Sciences USSR

IFPSOAN

Institut fiziki poluprovodnikov SOAN
Institute of Semiconductor Physics, Siberian Branch
Academy of Sciences USSR, Novosibirsk

IFPV

Institut fiziki poluprovodnikov AN LitSSR
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IFSOAN

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IFTT

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IMMGU
Institut mehaniki Moskovskogo GU
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INKhS
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Institute of Petrochemical Synthesis, Academy of Sciences USSR, Moscow

IOA
Institut optiki atmosfery SOAN
Institute of Atmospheric Optics, Siberian Branch Academy of Sciences USSR

IOAN
Institut okeanologii AN SSSR
Institute of Oceanography, Academy of Sciences USSR, Moscow

IOF
Institut obshchey fiziki AN SSSR
Institute of General Physics, Academy of Sciences USSR, Moscow

IPANUK
Institut poluprovodnikov AN UkrSSR
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IPFANBel
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IPFANM
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IPMe
Institut problem mehaniki AN SSSR
Institute of Problems of Mechanics, Academy of Sciences USSR, Moscow

IPOnk
Institut problem onkologii AN UkrSSR
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IPTMOM

Institut problem tekhnologii mikroelektroniki i
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Institute for Problems of the Technology of
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Sciences USSR, Chernogolovka

IRE

Institut radiotekhniki i elektroniki AN SSSR
Institute of Radioengineering and Electronics, Academy
of Sciences USSR, Moscow

ISAN

Institut spektroskopii AN SSSR
Institute of Spectroscopy, Academy of Sciences USSR

ISE

Institut sil'notochnoy elektroniki SOAN
Institute of High-Current Electronics, Siberian Branch
Academy of Sciences USSR, Tomsk

ISPM

Institut sinteticheskikh polimernykh materialov
AN SSSR, Moscow
Institute of Synthetic Polymer Materials, Academy of
Sciences USSR, Moscow

ITEF

Institut teoreticheskoy i eksperimental'noy fiziki
Institute of Theoretical and Experimental Physics, Moscow

ITeFUK

Institut teoreticheskoy fiziki AN UkrSSR
Institute of Theoretical Physics, Academy of Sciences
Ukrainian SSR, Kiev

ITF

Institut teplofiziki SOAN
Institute of Thermophysics, Siberian Branch Academy of
Sciences USSR, Novosibirsk

ITM

Institut tekhnicheskoy mehaniki AN UkrSSR
Institute of Engineering Mechanics, Academy of Sciences
Ukrainian SSR, Dnepropetrovsk

ITMO

Institut teplo- i massoobmena AN BSSR
Institute of Heat and Mass Exchange, Academy of Sciences
Belorussian SSR

ITPM

Institut teoreticheskoy i prikladnoy mehaniki SOAN
Institute of Theoretical and Applied Mechanics, Siberian
Branch Academy of Sciences USSR, Novosibirsk

IVTAN

Institut vysokikh temperatur AN SSSR
Institute of High Temperatures, Academy of Sciences USSR

IYaFANUz

Institut yadernoy fiziki AN UzSSR
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Uzbek SSR, Ulugbek

IYaFSOAN

Institut yadernoy fiziki SOAN
Institute of Nuclear Physics, Siberian Branch Academy of
Sciences USSR, Novosibirsk

KaGU

Kazanskiy gos universitet
Kazan' State University

KazFTI

Kazanskiy fiziko-tehnicheskiy institut AN SSSR
Kazan' Physicotechnical Institute, Academy of
Sciences USSR

KazGU

Kazakhskiy gos universitet
Kazakh State University, Alma Ata

KGU

Kiyevskiy gos universitet
Kiev State University

KhGU

Khar'kovskiy gos universitet
Khar'kov State University

KhIIZhT

Khar'kovskiy institut inzhenerov zheleznodorozhного
transporta

Khar'kov Institute of Railroad Transport Engineers

KIYAI

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Institute of Nuclear Research, Academy of
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Kiyevskiy politekhnicheskiy institut
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LETI

Leningradskiy elektrotekhnicheskiy institut
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LGPI

Leningradskiy gos pedagogicheskiy institut
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LGU

Leningradskiy gos universitet
Leningrad State University

LPI
Leningradskiy politekhnicheskiy institut
Leningrad Polytechnic Institute

LvPI
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L'vov Polytechnic Institute

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Moscow Aviation Technical Institute

MEIS
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Moscow Electrotechnical Institute of Communications

MFTI
Moskovskiy fiziko-tekhнический institut
Moscow Physicotechnical Institute

MGU
Moskovskiy gos universitet
Moscow State University

MIFI
Moskovskiy inzhenerno-fizicheskiy institut
Moscow Engineering Physics Institute

MIREA
Moskovskiy institut radiotekhniki, elektroniki i
avtomatiki
Moscow Institute of Radio Engineering, Electronics
and Automation

MISIS
Moskovskiy institut stali i splavov
Moscow Institute of Steel and Alloys

MITKht
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imeni Lomonosova
Moscow Institute of Fine Chemical Technology
imeni Lomonosov

MIU
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Moscow Institute of Control imeni Ordzhonikidze

MOPI
Moskovskiy oblastnoy pedagogicheskiy institut
im. N.K. Krupskoy
Moscow Oblast Pedagogical Institute
im. N.K. Krupskaya

MRI
Minskiy radiotekhnicheskiy institut
Minsk Radio Engineering Institute

MVTU
Moskovskoye vyssheye tekhnicheskoye uchilishche im
Baumana
Moscow Higher Technical College imeni Bauman

NGU

Novosibirskiy gos universitet
Novosibirsk State University

NIFKhI

NI fiziko-khimicheskiy institut im Karpova
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NIIBIKhS

NII po biologicheskim ispytaniyam khimicheskikh
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NIIPFP

NII prikladnykh fizicheskikh problem pri
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NIIYaF

NII yadernoy fiziki pri Moskovskom gos universitete
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Moscow State University

NIKFI

NI kinofotoinstitut
Scientific Research Institute of Motion Pictures and
Photography, Moscow

NIOPIK

NII organicheskikh poluproduktov i krasiteley
Scientific Research Institute of Organic
Intermediates and Dyes, Moscow

NITsTLAN

NI tsentr po tekhnologicheskim lazeram AN SSSR
Scientific Research Center for Industrial Lasers,
Academy of Sciences USSR

NovgPI
Novgorodskiy politekhnicheskiy institut
Novgorod Polytechnic Institute

NPOKIANAZ
Nauchno-proizvodstvennoye ob"yedineniye kosmicheskikh issledovaniy AN AzSSR
Scientific Production Association of Space Research,
Academy of Sciences Azerbaijan SSR, Baku

NSPGAN
Nauchnyy sovet AN SSSR po probleme "Golografiya"
Scientific Council on Holography, Academy of Sciences USSR

OGU
Odesskiy gos universitet
Odessa State University

OIYaI
Ob"yedinenyy institut yadernykh issledovaniy
Joint Institute of Nuclear Research, Dubna

ONITEkhim
Otdeleniye NII tekhniko-ekonomiceskikh issledovaniy khimicheskoy promyshlennosti
Department of Scientific Research Institute of Technical Economic Studies of the Chemical Industry, Cherkassy

OOFA
Otdeleniye obshchey fiziki i astronomii AN SSSR
Department of General Physics and Astronomy,
Academy of Sciences USSR, Moscow

PetGU
Petrozavodskiy gos universitet
Petrozavodsk State University

PMMI
Pervyy Moskovskiy meditsinskiy institut im Sechenova
First Moscow Medical Institut imeni Sechenov

SFTI
Sibirskiy fiziko-tehnicheskiy institut im Kuznetsova
Siberian Physicotechnical Institute imeni Kuznetsov,
Tomsk

SGI
Sverdlovskiy gornyy institut
Sverdlovsk Mining Institute

SKBOptika
Spetsial'noye konstruktorskoye byuro nauchnogo priborostroyeniya "Optika" SOAN
"Optika" Special Design Bureau for Scientific Instrument Manufacture, Siberian Branch Academy of Sciences USSR, Tomsk

SKTBSEAP

SKTB spetsialnoy elektroniki i analiticheskogo
priborostroyeniya, SOAN SSSR, Novosibirsk
Special Design and Technology Bureau for
Specialized Electronics and Analytical
Instrument Manufacture, Siberian Branch
Academy of Sciences USSR, Novosibirsk

TashGU

Tashkentskiy gos universitet
Tashkent State University

TbGU

Tbilisskiy gos universitet
Tbilisi State University

TOI

Tikhookeanskiy okeanologicheskiy institut
Dal'nevostochnogo nauchnogo tsentra AN SSSR
Pacific Oceanographic Institute, Far Eastern
Scientific Center, Academy of Sciences USSR,
Vladivostok

TsNIITEIpriboro

TsNII informatsii i tekhniko-ekonomiceskikh
issledovaniy priborostroyeniya, sredstv
avtomatizatsii i sistem upravleniya
Central Scientific Research Institute of
Information and Technical Economic Studies on
Instrument Manufacture, Means of Automation,
and Control Systems, Moscow

TulPI

Tul'skiy politekhnicheskiy institut
Tula Polytechnic Institute

UDN

Universitet druzhby narodov im Lumumby
University of Friendship Among Peoples
imeni Lumumba, Moscow

UkrNIINTI

Ukrainskiy NII nauchno-tehnicheskoy informatsii i
tekhniko-ekonomiceskikh issledovaniy Gosplana
UkrSSR

Ukrainian Scientific Research Institute of Scientific
and Technical Information and of Technical Economic
Studies for the State Plan of the Ukrainian SSR, Kiev

UzhGU

Uzhgorodskiy gos universitet
Uzhgorod State University

VGNIPIKFP

Vsesoyuznyy gos NI i proyektnyy institut fiziko-
fotograficheskoy promyshlennosti
All-Union State Scientific Research and Planning
Institute of the Photographic Chemical Industry,
Moscow

VGU

Voronezhskiy gos universitet
Voronezh State University

VilGU

Vil'nyusskiy gos universitet
Vilnius State University

VINITI

Vsesoyuznyy institut nauchnoy i tekhnicheskoy
informatsii
All-Union Institute of Scientific and Technical
Information, Moscow

VNIIFTRI

VNII fiziko-tehnicheskikh i radiotekhnicheskikh
izmereniy
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technical and Radiotechnical Measurements, Moscow

VNIILOChV

VNII lyuminoforov i osobo chistykh veshchestv
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VNIIM

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All-Union Scientific Research, Planning, Design and
Technological Institute of Current Sources

VTsSOAN

Vychislitel'nyy tsentr SOAN
Computer Center, Siberian Branch Academy of Sciences
USSR

VZMI

Vsesoyuznyy zaochnyy mashinostroitel'nyy institut
All-Union Correspondence Institute of Mechanical
Engineering

YeGU

Yerevanskiy gos universitet
Yerevan State University

YelGPI

Yelabuzhskiy gosudarstvennyy pedagogicheskiy institut
Yelabuga State Pedagogical Institute

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ALIMPIYEV S S	72	BAKIROV M YA	92	BIRJEGA M I	82
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BRODE F	38	CHERNYAVSKIY A F	60	DOVCHENKO D N	32
BRODZELI M I	55	CHERNYSH L V	24	DRAGANESCU V	69
BRUECKNER V	16, 21, 64	CHERTOV V G	39	DRAGANOV A B	27
BRUK M R	39	CHESKIS S G	15	DROKOV G F	10
BRUNKE W	39	CHETVERUSHKIN B N	92	DUBINSKIY M A	1
BRUNNER V	34	CHIGRINOV V G	21, 22	DUBOV S I	84
BRUNNER W	34, 89	CHIKIN K R	89	DUBOVIKOV M S	63
BRUNOV V V	89	CHIKISHEV A YU	75	DUBOVIKOVA YE A	63
BRYKSI V V	21	CHILINGARYAN YU S	22	DUBROVIN V F	38
BRYKSI V Z	57	CHIRKIN A S	15, 26, 61	DUBROVSKIY G V	10
BRYUNETKIN B A	89	CHISTYAKOV A A	59	DUDAREVA L G	57
BRZHEZINA B	80	CHISTYY I L	29	DUDAREVICH A L	54
BUCHENKOV V A	4	CHIZHIKOV G G	61	DUDICH M I	68
BUDAGYAN I F	38	CHMEL' A YE	82	DUKHOPEL I I	56
BUDYANU V A	88	CHOBAN E A	89	DUKHOVNER A N	45
BUFETOV I A	48	CHOPORNYAK D B	87	DUMAREVSKIY YU D	54
BUGAYEV A A	55, 82	CHRENYY V V	63	DURASOV V M	17
BUGRIMOV S N	14	CHRATSOVA Z	28	DVURECHENSKIY A V	87
BUKHENSKIY M F	23	CHUMAK L V	78	DYAKIN V M	89
BUKHINNIK A YU	39	CHUNIN B A	18	D'YAKONOV A M	61
BUKIN G V	1	CHURAYEV A L	62	DYATEL V P	84
BUKOVA YE S	48, 73	CHVANOV D V	83	DYKHNE A M	66
BUKSHTAM B M	61	CSILLAG L	34	DZHIBLADZE M I	7
BULANIN M O	72	CSOCSAN L	39	DZHOTYAN G P	27
BULATOV YE I	86			DZHURTANOV B YE	5
BULAVKO A A	39	DAMASKIN I A	68, 88		
BULDakov V M	48	DAMM T	51	EBERLEIN D	39, 40
BULYGIN A S	29	DANILEYKO YU K	85	EBRALIDZE T D	55
BULYSHEV A YE	34	DANILOV V V	21	ELENKRIG B B	6
BUNIMOVICH L A	15	DANILOVICH N I	83, 88	EPP V YA	33
BUNKIN A F	27	DANILYCHEV V A	8	ERME E K	76
BUNKIN F F	89	DAVIDENKO V F	39	ESHKOBILOV N B	65
BUNKIN F V	11, 85	DAVYDOV A S	93	ESIASHVILI Z G	7
BUNKIN N F	59	DAVYDOVA I N	55	EVENTOVA I L	77
BURAKOV V S	73	DEDIKOV YU A	66	EYDZHYNAS G S	30
BURMASOV V S	62	DEDUSHENKO K B	39		
BUTASHIN A V	3	DEKANOZISHVILI G G	55	FAM LE KIEN	23
BUTENKO A V	52	DEMCHUK A V	83, 88	FAM LE KIYEN	23
BUTKEVICH V I	11	DEMENT'YEV S A	42	FAM VAN KHOY	44
BUTYLKIN V S	26	DEM'YANOV A V	13	FASSLER D	7
BUZHINSKIY I M	87	DEM'YANTSEVA S D	19	FATTAKHOV A M	44
BYCHKOV A G	71	DENISYUK YU N	55, 93	FAYNBERG B D	74
BYCHKOV S G	59, 82	DERKACH O N	66	FAYZULLOV F S	52, 53
BYKOV A D	10, 73, 78	DERYUGIN A A	10	FEDAK V V	18
BYKOVSKIY P I	73	DERZHIEV V I	11, 89	FEDENEV A V	11
BYKOVSKIY V A	68	DESYATKOV A V	59	FEDIRKO V A	17
BYKOVSKIY YU A	39, 59	DEVDARIANI A Z	9	FEDORIV R F	46
CANDEA R M	59	DIANOV YE M	23, 31, 39, 40	FEDOROV A B	74
CAO LONG VAN	23	DICK M	90	FEDOROV A V	24
CHALEY A V	52	DIDEYKIN A T	20	FEDOROV G M	87
CHAMOROVSKIY YU K	40	DIKHTIYEVSKIY O V	83	FEDOROV V B	48
CHAVCHANIDZE T O	36	DINDAROV V E	76	FEDOROVICH A YE	5
CHAYKA M P	68	DMITRIYEV A L	60	FEDOROVICH N V	67
CHAYKOVSKIY I A	23, 29	DMITRIYEV A P	29	FEDOROVICH V YU	25
CHAYKOVSKIY YE V	74	DMITRIYEV A V	19	FEDOSEYEV S A	83, 88
CHEBOTAR' V N	24	DMITRIYEV A YE	62	FEDOTKINA N M	7
CHEBOTAYEV V P	1, 60	DMITRIYEV V G	45	FEDOTOV S I	52, 90
CHEBUNIN V G	65	DMITRIYEV YU N	27	FEDUKOV S V	89
CHEBURKIN N V	10	DOBOSH M V	74	FEHLAU G	25
			80	FELTYN' I A	62

FERBER R S	22,79	GLUSHCHENKO O A	12	GUREVICH S B	62
FEYZULLAYEV A A	48	GODLEVSKIY A P	48,49	GURSKIY A L	75
FIL' V A	61	GODZHAYEV M O	72	GUR'YANOV A N	40
FILIMONOVA V A	47	GOETZ K	90	GUR'YEV V I	14
FILIMONOVA Z K	18	GOFMAN M	40	GUSEV O B	68
FILIPP B S	36	GOLA E	83	GUSEV V E	29,31
FILIPPOV A YE	59	GOL'DBERG M M	63	GUSEV V G	63
FILONOV A G	12	GOLDOBIN I S	6	GUS'KOV S YU	90
FIRSOV K M	49,50	GOLDOVSKIY V L	75	GUSOVSKIY D D	40
FISCHER R	34	GOLOVCHENKO G S	38	GUTSAKI V N	60
FISHER P S	26	GOLOVCHENKO YE A	23		
FISHER R	34	GOLOVKO L F	84,86	HACKEROTT J	60
FISHMAN I S	9	GOLOVKO L N	68	HANSEL G	39
FLOREA V	19	GOLOVLEV V V	32	HARTMANN H	7
FOERSTER E	90	GOLUBENKO YU V	36	HAUBENREISSER W	66
FOKIN V S	36	GOLUBEV A A	90	HEBENSTREIT J	7
FOMICHEV A A	32	GOLUBEV V G	75	HEGNER M	90
FOMIN O N	63	GOLUBOV G G	6	HEINRICH A	75
FOMIN V K	48	GOLUBOV V S	40	HENING AL	87
FORTUS V M	51	GOMBOYEV V TS	73	HENKEL W	73
FORTYGIN A A	69	GONCHAR V F	80	HENSCHLER D	15
FRADIN A Z	40	GONCHARENKO I A	40	HERGER R L	23
FRANTSSESSON A V	42	GONCHAROV V K	60,85	HERKLOTT R	23
FREYER W	18	GONCHUKOV S A	9	HILD R	46
FREYVALDE I R	62	GONDRA A D	3	HOCHHEIMER H D	73
FREZINSKIY B YA	50	GONGADZE A SH	60	HOENLE W	73
FRIDKIN V M	71	GORBACH A F	86	HRIBEK P	7
FRIDMAN A A	63	GORBACH V G	85	HULTZSCH R	7
FRIEDRICH B	7	GORBACHEV O V	40		
FROLOV M P	14	GORBANEVA I I	85	IGNATOV A B	29
FUCHKO V YU	16	GORBUNOV A A	89	IGNAT'YEV A G	65
FURDUYEV A V	55	GORBUNOV L M	29	IGNAT'YEV A S	62
GADOMSKAYA I V	24	GORBUNOV S V	75	IGNAT'YEV M B	86
GADOMSKIY O N	24	GORCHAKOV A P	40	IGOSHIN V I	85
GADZHI-ZADE F M	48	GORDIYENKO V M	45	ILGE H D	7
GADZHIYEV M G	18	GORELENOK A T	20	IL'ICHEV N N	2
GAKAMSKIY D M	74	GORELIK V S	75	IL'IN V YE	60
GALAZKA R	27	GORKAVENKO V V	51	IL'INOVA T M	69
GAL'PERN A D	55	GORLOV S N	63	IL'INSKIY YU A	47
GALUMYAN A S	27	GOROBCHENKO V S	1	IMAMOV E Z	68
GALUSHKIN M G	10	GORODETSKAYA O G	71	IMENKOV A N	5
GAMALEYA N F	36	GOROKHOV A A	18	IOGANSEN A A	15
GAMALIY V F	72	GOROKHOVSKIY A V	78	IONOV S I	58
GANZHERLI N M	62	GORSHKOV A S	62	IOVA I	90
GARBUZOV D Z	6	GORSHKOV V A	63	IPPOLITO V I I	51
GARIBASHVILI K A	55	GORYACHEV D N	67	IRMER G	75
GAROVA YE A	28	GORYACHKIN D A	52	ISAKOV I M	13
GAS'KOV A M	88	GOVOROV A I	89	ISAVEDIYEV A A	85
GASTEV S V	68	GOVORUN D N	75	ISAYEV A A	12
GAVRILOVICH A B	45	GRACHEV A I	69	ISAYEV A S	89
GAVRILYUK A P	68	GRADOV V M	3	ISAYEV S K	7
GAVRYUSHENKO B S	52	GRAICHEN H	83	ISAYEV V A	40
GAYDUK M I	36	GRANSKIY P V	72	ISHCHENKO A A	8
GAYDUKOV M N	50	GRASYUK A Z	89,91	ISHCHENKO V N	13
GAYSENOK V A	93	GREKOVA S N	6	ISMAILOV I	93
GAYZHAUSKAS E	28	GRIBOV L A	25	IVACHEVSKIY A I	44
GENKIN S A	13	GRIGOROV I	20	IVAKIN YE V	17
GEORGESCU CL	19	GRIGOROV L N	83	IVANOV A A	75
GEORGESCU M	65	GRIGOR'YANTS V V	36,40	IVANOV A B	69
GERASIMENKO B P	63	GRIGOR'YEVA T M	63	IVANOV A D	85
GERASIMOV V B	19	GRINCHESHEN I N	68	IVANOV A P	45
GERAS'KIN V V	62	GRITSAN N P	69	IVANOV G A	40
GERMAN S I	23	GROMOV G G	88	IVANOV I P	62
GERMEY K	23	GROPPA L	37	IVANOV M G	82
GEYMAN V G	13	GRUZ E A	56	IVANOV N A	2
GILEL'S A M	55	GRUZEVICH YU K	22	IVANOV N N	40
GINZBURG N S	33	GUDAKOVSKIY YU P	36	IVANOV S V	5,63
GLADKOV S M	74	GULIYEV I S	48	IVANOV V A	11
GLADYSHEV A A	75	GULYAYEV G A	77	IVANOV-OMSKIY V I	75
GLADYSHEV S A	86	GULYAYEV YU V	6	IVANOVA L A	19
GLEBOV I B	40	GURDEV L	20	IVANOVA T F	8
		GUREVICH S A	5	IVANOVA YE B	39

IVANOVSKAYA M I	62	KAZYUCHINTS N M	88	KOGALAPKIN G YU	51
IVLIYEV A D	86	KELDYSH L V	28,63	KOGAN A N	85
IVLIYEV S V	81	KEL'MAN V A	16	KOKHMAN'SKI S	33
IZLEVA L D	72	KELOGLU O YU	67,76	KOL'CHEVSKAYA T O	8
IZMAYLOV YE A	85	KENGERLINSKIY L YU	80	KOLENKO YE A	20
IZVOZCHIKOV V A	93	KERIMOV O M	8	KOLESNIK A V	60
JAGOSZEWSKI E	55	KERSTAN F	16,21,64	KOLESNIKOV V N	60
JAHN J U	66	KESSLER S	46	KOLOMIYETS T M	56
JANIKIJEVIK LJ	45,56	KETKOVICH A A	64	KOLOSOV YE YE	69,70
JANKIEWICZ Z	3	KEVORKIJAN V	40,41	KOLPAKOVA N N	80
JOERGES U	40	KEVORKOV L M	30	KOLPASHCHIKOV V L	39,41,43
JONOSKA M	45,46	KHABAROV S E	69	KOMIN I A	52
JOZWIKOWSKI K	20	KHABAROV V V	26	KOMISSAROV A B	6
JUNGE K	89	KHABIBULLAYEV P K	37,84	KOMISSAROVA I I	61
JUNGK G	17	KHAIT O V	11	KOMOTSKIY V A	46
KAARLI R K	57	KHALILOV V R	95	KOMPAN M YE	76
KABANOV M V	46	KHANIN YA I	32	KONDRA'T'YEV A I	62
KABANOV S P	59	KHAPOV YU I	13	KONDRA'TYUK N V	1
KABANOV V V	52	KHARITONOV V V	89	KONDYREV A M	82
KACHANOVSKIY A YE	81	KHAYTUN F I	41,49	KON'KOV A A	10
KACHINSKIY A V	26,32	KHIL'CHENKO A D	62	KONKURIN YU L	49
KAGAN M B	16	KHLESKOVA T N	43	KONOBEEV V M	21
KAHLERT V	83	KHOLODENKO E B	85	KONONENKO I I	56
KAKICHASHVILI SH D	56	KHOMICH V YU	18	KONONOV N N	63,90
KALABUSHKIN O I	85	KHOMKIN A L	86	KONOVOV V I	89
KALASHNIKOV M P	90	KHORUZHNIKOV S E	41	KONOVALOV I P	77
KALEDIN L A	74	KHOSHIMOV M M	69	KONOVO'DCHENKO V A	69
KALININ V P	52	KHOTYAITSEV S N	61	KONSTANTINOV L	38
KALININA I V	55	KHOVIV A M	84	KONTSEVOY V L	60
KALITIN S P	2,4	KHRAMTSOV P P	39	KONVISAR P G	27
KALMYKOV A M	27	KHYASHCHEV L YU	76	KOPA-OVDIYENKO A L	46
KALNYNYA R P	62	KHURKHULU YU S	18	KOPETSKIY CH V	84
KAMALOV V F	75	KHUSNUTDINOV A N	72	KOP'YEV P S	5
KAMENICKY I	10	KIDALOV S V	20	KOPYLOV L N	63
KAMINSKIY A A	1,3,30,93	KIELICH S	76	KOPYT S P	6
KAMOVA N N	37	KIKINESHI A A	18	KOPYTIN YU D	48,49
KAMRUKOV A S	14	KILIN S YA	72	KORABLEVA S L	1
KANAYEV A V	23	KIL'K A V	76	KORDYUKOV N I	86
KANDIDOV V P	46	KIM B G	82	KORLYAKOV V K	86
KAPORSKIY L N	85	KINK R A	76	KORNILOV S T	76
KARABAN' V I	85	KIRCHHOF J	41	KORNIOLOVA N B	5
KARABUTOV A A	29	KIREYEV S V	9	KORNIYENKO A A	30,93
KARACHEVTSEV V A	69	KIRICHENKO N A	85	KORNIYENKO N YE	28
KARAGEORGIA-		KIRKIN A N	93	KOROBKIN V V	65
ALKALAYEV P M	88	KIR'YANOV V P	32	KOROLEV A YE	56
KARALIN A V	89	KISELEV A A	51	KOROLEV V	69
KARAS' V I	66	KISELEV B S	76	KOROLEV YU D	9,13
KARASEV V YU	25	KISLETSOV A V	69	KOROL'KOV V I	20
KARASIK A YA	31,40	KISTENEV YU V	10	KOROTEYEV N I	74,75
KARAU'L'NIK A YE	61	KITAYEVA V F	25,29	KOROTKOV A N	64
KARLIK I YA	69	KIZEVETTER D V	41	KOROTKOV P A	75
KARLOV N V	10,63,69,72,90	KLEIN G	41	KOROVIN L I	21
KARMANOV L L	65	KLEINERT P	41	KORSHUNOV A B	88
KARN A	22	KLIM B P	46	KORSHUNOV V A	49
KARPOV I I	89	KLIMENKO V A	75	KORUNNYY V N	61
KARPOV S V	25	KLIMOVA L A	36	KORZININ YU L	56
KARPOV S YU	87	KLIMOVSKIY I I	16	KOSHELYAYEVSKIY N B	63
KARPOVICH I A	70	KLOKISHNER S I	31,80	KOSICHKIN YU V	72,81
KARTASHEVA O A	56	KLUDZIN V V	30	KOSTANYAN R B	4
KASCHKE M	51	KLYSHKO D N	94	KOSTKA F	38
KASHNIKOV G N	14	KNIGAVKO N V	63	KOSTOV Z M	25
KASK N YE	87	KOBTSEV S M	8	KOSTYSHIN M T	56
KAS'YANENKO S V	12	KOBYLYANSKIY A I	74	KOTLIKOV YE N	76
KATAYEV M YU	76	KOCH R	90	KOTLYAROV V P	84
KAVALYAUSKAS YU F	30	KOCHANOV V P	76,94	KOTOCHIGOVA S A	76
KAVTREV A F	17,57	KOCHAROVSKAYA O A	32	KOTOV B A	54
KAVUN A A	52	KOCHELAP V A	94	KOVAL'CHUK A S	2
KAZAK N S	26	KOCHETOV I V	13	KOVAL'CHUK L V	15
KAZARYAN R A	47	KOCHUBEY S A	13	KOVAL'CHUK YU V	87
KAZHUKAUSKAS V	71	KODIN N V	6	KOVALENKO V S	84,86
		KOEHLER TH	83	KOVALEV A A	2,21

KOVALEV A M	18	KULIKOV I I	89	LEVIN M B	7,8
KOVALEV I O	10	KULIKOV V V	77	LEVITSKIY A A	63
KOVALEV M A	87	KULIPANOV G N	94	LEVOV S N	22
KOVALEV V I	52,53	KULISH V	33	LEVSHIN L V	31
KOVARSKIY V A	22,24,36	KULYAK I P	38	LEYDERMAN A YU	88
	76,94	KULYASOV A G	50	LIBENSON M N	58,85
KOVTONYUK N F	54	KUNCOVA G	38	LICHKOVA N V	73
KOVTYAK D S	39	KUNEVICH A P	18	LIKACHEV I G	39
KOZIKOV V A	85	KUOKSHTIS E	66	LIKHANSKIY V V	10
KOZIN G I	77	KUPREVICH V V	60	LINDE KH	71
KOZIRATSKIY YU L	49	KURATEV I I	30	LIPATOV N I	11,23
KOZLOV A I	28	KURBASOV V V	49	LIPOVSKIY A A	41
KOZLOV N P	14	KURBATOV A A	34	LIPOVSKIY I M	78
KOZLOV V A	40	KURBATOV A L	4	LIPPmann W	41
KOZLOVA YE K	59	KURCHINSKAYA L N	38	LISITSA M P	4
KOZLOVSKAYA I M	52	KURENKOV A V	52	LISTRATOVA G V	18
KOZLOVSKIY S I	70	KURICHENKO A L	86	LISYUTENKO V N	59
KOZMANYAN A A	44	KURITSYN YU A	77	LITVIN B N	76
KOZOLUPENKO V P	82	KURMAZ V A	67	LIZHDVOY K YA	61
KOZUBSKIY E V	64	KURNOSOV V D	5	LOBANOV V F	49
KOZYREV S V	20	KURNYAVKO YU V	6	LOGUNTSEV YE N	80
KRABE D	17	KUROCHKIN N N	45	LOGUTKO A L	45
KRAPIVIN L L	86	KUROCHKIN YU V	85	LOKHMAN V N	58
KRAPOSHIN V S	84,85	KUROV A YU	47	LOMAKO V M	66
KRASHENINNIKOV A A	70	KURSAKOVA A M	57	LOMINADZE DZH G	90
KRASILOV YU I	30	KURSHALIS S K	22	LOMTEV A I	24
KRASIN'KOVA M V	69	KUZ'MENKO V A	10	LOPATIN V V	70
KRASNOV I V	68	KUZ'MIN G P	10,63,90	LOSEV L L	89,91
KRASOVSKIY A N	77	KUZ'MIN M V	59,77	LOSEV S A	13
KRAUZE U	12	KUZ'MINOV YU S	1	LOTKOVA E N	10
KRAVCHENKO V B	1,93	KUZNETSOV A A	10,21	LOYKO M M	2
KRAVCHENKO V I	75	KUZNETSOV A I	81	LUKIN K A	33
KRAVTSOV N V	28	KUZNETSOV S I	62	LUKIN V V	58
KRAVTSOV YU A	39	KUZNETSOV V A	77	LUKINYKH V F	25
KRAYNOV V P	23	KUZNETSOV V I	32	LUKOSHKIN V A	82
KRAYSLER O D	75	KUZNETSOV V N	49	LUK'YANCHUK B S	19,59,85
KREKOV G M	95	KUZNETSOVAL A	78	LUK'YANENKO S F	78,80
KRESSER M	51	KUZYAKOV YU YA	74	LUNIN B S	64
KREST'YANINOV A S	24	KVACHENOK V G	60	LUSHNIKOV A A	51
KREYSIG D	59			LYAKISHEV V G	10
KRINDACH D P	8	LABZOVSKIY L N	92	LYAMSHEV L M	66
KRIVENKO A G	67	LADYGIN I N	48,73	LYAPTSEV A V	76
KRIVOSHICHEKOV V A	53	LAGUCHEV A S	69	LYKHMUS A E	76
KRIVTSUN V M	77	LAMANOV A L	65	LYPKAN' N M	49
KROMIN S I	64	LANCRANJAN I	19	LYSOV A B	18
KROO N	34	LANIN YU I	41	LYUBIMOV V V	15,18,19,64
KRUGLIK G S	1	LAPIDES A A	55	LYUBOVTEVA YU S	51
KRUGLYAKOV E P	62	LAPTEV V V	2,4		
KRUMIN' A E	1	LASHKOV G I	17,57,58,64	MACHKOVA N A	36
KRUSHAS V	28	LATUSH L T	78	MADVALIYEV U	81
KRYLOV A N	18	LATYSHEV S V	90	MAGARILL L I	87
KRYLOV P S	9	LAUTH H	25	MAILYAN A E	28
KRYLOV V S	71	LAVRIK N L	13	MAK A A	18,36
KRYUCHKOV G YU	27	LAZAREV M V	30	MAKAROV A A	74,78
KRYUKOV P G	14	LAZAREV S V	48,63	MAKAROV G N	58
KRYUKOV V V	56	LEBEDEV A A	34	MAKAROV L G	89
KSANDOPULO G I	59,82	LEBEDEV A N	33	MAKAROV N A	19
KUBAREV V V	12	LEBEDEV V A	73	MAKAROV V N	13
KUBYSHKIN V A	37	LEBO I G	90	MAKAROV S	73,81
KUCHINSKIY G S	39	LEDENTSOV N N	5	MAK...	19
KUDYKINA T A	4	LEIDENBERGER G	40	MA...	58
KUFERT S	60	LEMANOV V V	30,61	MA...	80
KUKA G	41,42,43,44	LEMMERMAN G YU	12	MA...	86
KUKHAREV A V	41	LEONOV A G	13	MA...	76
KUKHTA V R	70	LEONOV B A	78	MA...	49,78
KUKLEV YU I	70,83	LEONOV YE I	70	MA...	73,78,79
KULAKOV A S	29	LEPASAAR T P	76	MA...	32
KULAKOV L V	14	LETOKHOV V S	58,59,72	MA...	63
KULAKOV YE V	38		74,94	MA...	74
KULESHOV A M	56	LEVASHKEVICH L V	2	MA...	85
KULESHOV N V	77	LEVDAVSKIY V V	70,83	MA...	30,93
KULIKOV A N	74	LEVI A M	21,60	MA...	27

MALYSHEV G F	59	MILL' B V	1,3,93	NAATS I E	50
MALYUGIN V I	41	MILOSALEVSKI Z	37	NABOKO V N	20
MALYUTA D D	66,84	MILYUTIN YE R	50	NABOYKIN YU V	1
MALYUTIN A A	2	MINASYAN L L	27	NADEYEV A I	50
MALYY A V	17	MINAYEV S M	85	NADEZHDINSKIY A I	77
MALYY V I	28	MINCHENKO A I	39	NADEZHDINSKIY A I	72,81
MAMAYEV A N	39	MINDAK M	3	NAGIBIN YU T	7
MAMAYEV A V	53	MINOGIN V G	70,94	NAGLI L YE	78
MAMONTOVA YU M	47	MIRKIN L I	85,86	NAKHUTIN I YE	78
MANENKOV A A	83	MIRLIN D N	69	NANASOV M P	65
MANOKHIN A I	86	MIRONENKO V R	77	NANU L	87
MANTHE H	42	MIRONOS A V	38	NAPARTOVICH A P	10,13
MARAKHONOV V M	5	MIRONOV A F	36	NARUBIN S L	77
MARASIN L YE	50	MIRONOV G V	26	NARUSBEK E A	18
MAREYEN M	23	MIRONOV V L	48,92	NASAKIN A A	88
MARIN M YU	90	MIROSHNIKOV M M	34	NAUMENKO O V	73
MARINYUK V V	78	MIROVITSKAYA S D	64	NAUMKIN N I	28
MARIS Z	65	MIROVITSKIY D I	38	NAZARENKO I N	84
MARKOSYAN A A	3	MIRTVOVA YE G	62	NAZAROV V N	56
MARKOVA R V	5	MIRZA S M	12	NAZYROV Z F	46
MARTIROSYAN G V	33	MIRZAKHANYAN A A	31	NECHAYEV O V	13
MARTYNENKO O G	41,83	MIRZAYEV A T	37,53,60	NECHAYEV S V	73
MARTYNOVA T A	42	MISHIN A V	40	NECHAYEV YE P	42
MARTYNOVICH A A	21	MISHIN V I	72	NECSOIU T	19
MAR'YENKOV A A	42	MISIUN R	64	NEDBAYEV N YA	28,31
MASHKEVICH V S	94	MITEV V	20	NEDOLUGOV V I	54
MASHKOVTSOV A N	57	MIT'KIN V M	34	NEFEDOV A L	89
MASLOV A V	81	MIT'KINA N N	79	NEGRIY V D	68
MASLOV V A	81	MITRESKA Z	45,46	NEKHAYENKO V A	7
MASYUTIN A A	30	MITROFANOVA T A	37	NEKRASOV G L	21
MATROSOV V N	1	MITSSEL' A A	49,76	NEMKOVICH N A	74
MATVEYEEVA T A	32	MITYAGIN M V	1	NERSISYAN G TS	28
MAURER I A	62	MITYUGOV V V	24	NESTERENKO A A	10,90
MAYBORODA V F	34	MNATSAKANYAN T A	47	NEUMANN N	90
MAYOROV S A	89	MOGILEVA L M	31	NEVEROV L A	65
MAZING M A	91	MOIN M D	70	NEVMERZHITSKIY V I	13
MAZURENKO YU T	24,56	MOISEYEV S S	90	NEVSKIY I A	51
MAZURKIEWICZ H	30	MOISEYEV V N	50	NICKLES P V	90
MEDIANU R	19	MOKEROV V G	62	NIIBIZI A	46
MEDOVIKOV A S	64	MOLDOVAN C	65	NIKANOVICH M V	2
MELESHKIN A V	78	MOLOCHNIKOV B I	52	NIKASHIN V A	54
MELIKISHVILI Z G	7	MONCHINSKIY V A	89	NIKIFOROV S M	72
MEL'NICHENKO T N	18	MONECKE J	75	NIKISHIN S A	5
MEL'TSER B YA	5	MONYAKIN A P	74	NIKITICHEV A A	4
MELYTSIN A L	61	MORDYUK V S	92	NIKITIN M M	33
MEN CHUN VON	86	MORICHEV I YE	21	NIKITIN V A	17
MERCEA V	59	MOROZOV A V	68	NIKOLAYEV G N	34
MERKULOV I A	82	MOROZOV V I	6	NIKOLAYEV V I	47
MERKUROVA S P	71	MOROZOV V N	5,40	NIKOL'SKAYA O K	3
MERSHAVKA V K	81	MOROZOV YU YU	85	NIKONOROV N V	40
MESHALKIN YE A	89,91	MOROZOVA YE A	85	NIKONOVA Z S	39
MESYATS G A	9,11,13	MORSHNEV S K	42	NILOV YE V	64
MEYLANOV R P	82	MORZHAN I	69	NIVIN A B	6
MEYYSEROVICH B E	91	MOSKALENKO A V	29	NIZAMOV N	31
MEZENOV A V	94	MOSKALENKO N I	73,81	NIZOVTSOV A P	72
MEZHEVOV V S	10	MOSKALENKO V A	34	NOACK F	51
MIGEL' V M	18	MOTYLEV S L	91	NOSOV A V	49
MIHAILESCU I N	86,87	MOVSHEV V G	10,74	NOVIKOV V D	24
MIKAYELYAN G T	6	MOZGOVOY V N	52	NOVIKOV V V	52
MIKHALEVICH V G	51	MOZHAROVSKIY A M	32	NOVOBRANTSEV I V	13
MIKHAYLESKU I	69	MUCHNIK M L	75	NOWAK J	57
MIKHAYLIN V V	95	MUDRYY A V	71	NOWAK S	83
MIKHAYLOV S I	52	MUELLER K	42	NOWAK W	42
MIKHAYLOV V YU	27	MUKHA V A	26	NOWICKI R	65
MIKHAYLOV YU A	90	MUKHTAROV CH K	24,89	NOZDRIN YU N	4
MIKHAYLOVA M P	19	MUMLADZE V V	55	NUNUPAROV M S	25
MIKHEYEV I. D	13	MURADYAN L KH	32		
MIKKHEL'SOO V T	76	MURAV'YEV I I	11		
MIKHLYAYEVA N V	86	MUSAYEV M A	52		
MIKLAVSKAYA YE M	26	MYACHIN V YE	87		
MILER M	56	MYSLIVETS S A	25		
MILINKIS B M	42	MYZNICKOV YU F	8		

OBOROTOV V A	40	PERELYGIN I S	25	POLUKHINA S P	61
OCHKIN V N	10	PERFEYEV V N	89	POLUNIN S P	66
ODABASHYAN G L	72	PERHSIN S M	7	POLYAKOVA YU A	3
ODULOV S G	1	PERINA J	22	POMAZOV V V	42
OGURTSOVA L A	1	PERKAL'SKIS B SH	70	PONEZHA G V	28
OMEL'YANCHUK A M	72	PERLIN YE YU	24	PONEZHA YE A	28
ONG KH L	22	PERLIN YU YE	3, 93	PONOMAR' V V	38
ONISHCHUKOV G I	32	PEROV A A	59	PONOMAREV D I	10
OPEKAN A G	14	PESTOV E G	24	PONOMAREV YU N	46, 47, 49, 50
OREKHOVA N V	51, 52	PESTRYAKOV YE V	1	PONOMAREV YU V	82
ORISHICH A M	10	PESTUNOV V YU	15	PONOMAREVA S B	50
ORLOV A N	69	PETRAKOVSKIY G A	70	POPECU GH	9, 64
ORLOV N G	63	PETRASH G G	12	POPECU-POGRION N	82
ORLOV R YU	75	PETRENKO R A	28	POPKOV V G	27, 52
ORLOV V A	20	PETROSYAN A G	3, 93	POPOV A I	9, 48, 52
ORLOV V K	14, 19	PETROSYAN A K	31	POPOV A K	25, 26, 27, 52
ORLOV V M	69, 70	PETROV A N	11	POPOV A P	57
ORLOV V V	53	PETROV M B	18	POPOV A V	12
ORLOVA M A	53	PETROV M P	69	POPOV I V	47
ORMAN Z	20	PETROV M V	31, 80	POPOV V V	73
OSETROV V P	52	PETROV N S	24	POPOV YE A	29
OSIKO V V	2, 4	PETROV P G	64, 70	POPOV YU M	4
OSIPOV O I	84	PETROV V I	73, 79	POPOV YU V	65
OSIPOV V M	48	PETROV YU N	69	POPOVA T B	76
OSIP'YAN YU A	68	PETROVA A I	49, 78	POPOVICH N S	68
OSTANIN S A	48	PETROVA L I	60	PORAY-KOSHITS A B	52
OSTREYKOVSKIY I V	76	PETROVICHEVA G A	54	PORTNOV YE V	13
OSTROMETSKIY V A	85	PETROVSKIY G T	40	PORTNOY YE L	5
OSTROUMENKO A P	21	PETROVSKIY V N	11	PORTNYAGIN A I	59
OSTROUMOV V G	4	PETRUN'KIN V YU	54, 60	POSUKH V G	10
OSTROVSKAYA G V	61	PEVTSOV V F	6	POTAPKIN B V	63
OSTROVSKIY A V	36	PHAM VAN HOI	44	POTAPOV A I	7
OSTROVSKIY V A	70	PIGUL'SKAYA V V	10	POTAPOV M M	59
OSTROVSKIY V N	9	PIKIN A I	89	POTAPOV S K	79
OSTROVSKIY YU I	61	PILIPETSKIY N F	53	POTEKHETSKIY S V	49
OVCHARENKO N V	44	PILIPOVICH I V	26	POTEMKIN A V	30
OVCHINNIKOV A V	6	PILIPOVICH V A	2	POYUROVSKAYA I YE	86
OVCHINNIKOV P A	14	PIL'SKIY V I	90	POZDNYAKOV A YE	87
OVCHINNIKOV S N	63	PIMENOV V P	59	PREDTECHENSKIY YU B	73
OVCHINNIKOV V M	84	PIRAGS M YA	79	PREOBRAZHENSKIY N G	34
OVCHINNIKOV-SAISONOV A M	52	PIROGOV YU A	35	PRESLENEV L N	30
OVECHKINA T G	54, 57	PISARENKO V F	73	PRISHCHEPOV A S	31
OVSYANKIN M A	49	PISHKO YE D	36	PRISTREM A M	83, 88
		PISKARSKAS A	28, 32	PRIVALOV V YE	11
PAK I	77	PIS'MENNYY V D	66, 84	PRIVALOVA T A	34
PANIN A M	91	PITATELEV M M	33	PRIYEZZHEV A V	36, 45
PAPANYLN V O	28	PITERKIN B D	8	PROKHOROV A M	2, 4, 10, 11
PAPULOVSKIY V F	40	PLESHANOV P G	36		18, 23, 31, 35
PARASHCHUK V V	75	PLESHANOV S A	7		39, 83, 85
PARFENOV A V	22	PLESHANOV YU V	49, 50	PROKOPOV A V	50
PARSHKOV O M	45	PLESSKIY V P	28	PROSHKIN V V	86
PASHININ P P	2, 11	PLETNEV V A	40	PROTASOV YU S	14
PASHKO O A	6	PLETNEVA N I	21	PROTSENKO YE D	9, 11, 76, 77
PASMANIK G A	28	PLOKHOTNYUK YE F	77	PRUDKIY V P	21
PASTOR A A	13	PLOSHAY L L	39	PRZHONSKAYA O V	7
PATLAKH A L	37	POBOTAYEV V G	65	PSHENICHNIKOV S M	20
PATRIN A A	88	POCHAPSKIY YE P	42, 46	PUKHOV K K	3, 93
PATRIN G S	70	PODDUBNYAK V YA	61	PUKHTA M	40
PAUL H	34	PODKOLZINA I G	31	PUKO R A	73, 78, 79
PAUL' KH	34	PODSHIVALOV A A	7	PUSHKINA N I	30
PAVLENKO A V	41	POEHLER M	15	PUSTOVALOV V K	50
PAVLOV N I	48	POGOREL'SKIY YU V	87	PUTILIN E S	19
PAVLYUKEVICH N V	83	POKROVSKAYA F S	1	PUTIVSKIY YU YA	45
PAZYUK V S	14	POKROVSKIY YU A	18	PYATNITSKIY L N	90
PCHELINTSEV A I	85	POLAK L S	63	PYLAYEV S YE	62
PECHLAT M	38	POLCHKOVA N D	4	PYSHKIN S L	88
PEKAR S I	94	POLETIKA I M	86	PYZIN G P	65
PELEKH L N	88	POLETIMOVA A V	31		
PELEVIN A V	3	POLOMSKA M	80		
PENKIN N P	13, 34	POLONSKIY L YA	90		
PEN'SHIN A M	72	POLOZKOV N M	1		
PEREL'MAN N F	22	POLUEKTOV P P	78		

RABKIN L M	78	RYKALIN N N	95	SHABUNYA S I	51,83
RACHKOV I A	6	RYSEV B P	66	SHADAREVICH A P	1
RACZYNSKI A	31	RZANOV V B	90	SHAFEYEV G A	59
RAETCHI V	87	RZEPEKA J	65	SHAGOV A A	71
RAKUSH V V	32			SHAKHLEVICH K V	84
RAMAZANOVA N A	82	SAARI P M	57	SHAKHOVA I B	57
RATNER O B	64	SACHENKO A V	67	SHAKIN O V	21
RAUTIAN S G	34	SACHKO YU I	42,43	SHAKIN V A	24
RAY G I	21	SADCHIKHIN A V	9,48	SHALAYEV V M	27,52
RAZHEV A M	13	SAFRONOV A N	53	SHALIN O YU	45
RAZVINA T I	79	SAGADEYEV A M	9	SHANANIN R A	11
REBANE A K	57	SAIDOV Z S	2	SHANGIN V A	26
REBANE I	79	SAKUN V P	3,93	SHANICHEV G YA	36
REBANE K K	35	SALAYEV E YU	72	SHANIN O I	52
REBEZOV A O	57	SALYADINOV V S	85	SHARAFYAN V R	33
RED'KO T P	34	SAMARTLEV V V	24	SHARIN P P	48,49
REMIZOV S A	29	SAMEL'SON G M	50	SHARIPOV R A	36
REMIZOVA YE I	29	SAMORODOV YU D	45	SHARKOV B YU	90
RENGE I V	72	SAMSON A V	60	SHARONOV G V	21
RENTSCH S	51	SAMSONOV V G	54	SHAROV V A	36
RESHETNIKOV V I	34	SANAMYAN T V	4	SHARSHIN YU A	61
REVA M G	7	SANDOV Z S	4	SHARYGIN L M	73,80
REVINSKIY V V	60	SAPEGA V F	69	SHASTIN V N	4
REYNGOL'D A V	90	SAPOZHNIKOV M N	79	SHCHEGLOV V A	12
REYTEROV V M	2	SAPRYKIN E G	79	SHCHERBAKOV A A	3
RIKHTER L YA	78	SAPTSOV V I	87	SHCHERBAKOV I A	2,3,4,20
RINKEVICH YUS B S	65	SARKISOV S E	1,3,93	SHEDENKOV S I	73,78
RISTOIU T	59	SARTAKOV B G	26,72	SHEDOVA YE N	61
RODCHENKOVA V V	7	SARZHEVSKIY A M	93	SHEKHTMAN V N	64
RODE A V	90	SATTAROV F A	57	SHELEKHOV N S	57
RODIN N V	4	SAVEL'YEV D A	21	SHELEVOY K D	50
RODIN P R	84	SAVEL'YEV V N	73	SHEN I R	22
RODIONOV A YU	15	SAVIN A I	54	SHENYAVSKAYA YE A	74
RODIONOV G D	79	SAVIN V I	45	SHER YE S	80
RODIONOV V I	10	SAYDASHEV I I	20	SHERNYAKOV YU M	5
ROGACHEV A A	5	SCHAFER K	90	SHEROZIYA G A	75
ROGALSKI A	20	CHMIDT D	41	SHERSTNEVA T N	54
ROGOV S A	54	SCHUETTE F J	23	SHERSTOBITOV V YE	53
ROMANENKO P F	56	SCHULZ P	22	SHERSTYANOV D I	89
ROMANENKO V V	84	SCHWOTZER G	66	SHESTAKOV A V	30
ROMANIUK R	42	SEBRANT A YU	66,82	SHESTOPALOV V P	33
RCMANOV D A	18	SEDLETSKIY O A	67	SHEVCHENKO T B	51
ROMANOV N A	52	SEGLIN'SH YA A	1	SHEVCHENKO V V	43
ROMANOV V P	51	SELEZNEV B I	84	SHEVEL'KO A P	91
ROMANOVTEV V V	77	SELEZNEV V V	89	SHEYFOT A I	50
ROMASHKO YE A	51	SELYAVKO L V	55	SHIDLOVSKIY V R	5
ROSSNER S	42	SEMENKOVICH G V	79	SHIGANOV S A	43
ROSSOMAKHO F V	65	SEMENOV A A	77	SHIGORIN D N	79
ROSTOVTSEVA N V	57	SEMENOV L P	91	SHIKTOROV P N	5
ROYTMAN L D	36	SEMENOV V V	60	SHILEYKA A YU	30
ROZANOV N N	24	SEMENOV YE P	60,62	SHILIN V A	95
RUBANOV A S	17,52	SEMENOVA G I	52	SHILOVA M V	69,70
RUBENCHIK A M	29	SEMENOVA T S	31	SHIROKANOV A D	86
RUBINOV A N	13,74	SEMEYUSHKIN I N	89	SHISHLAKOV V A	75
RUBISH V M	80	SEMEYKIN N P	61	SHKADAREVICH A P	1,2,71,93
RUDENKO I P	42	SEMINOV G V N	84	SHKUNOV V V	53
RUDENKO K V	88	SENATOROV A K	40	SHKURINOV A P	75
RUDENKO V P	49	SENONER M	5	SHLENOV S A	46
RUDIN G I	51	SERAK S V	21	SHLENSKIY A L	71
RUDINA O G	19	SERBRANT A YU	84	SHLIMAK I S	16
RUDSKIY I V	90	SERDORINTSEV P YU	13	SHMAL'KO A V	21
RUDSKOY I V	90	SERDYUKOV V I	73,80	SHSMARTSEV YU V	92
RUKHADZE A A	94	SEREБRYAKOV V A	18	SHMLEV G M	23
RUMYANTSEV K YE	20	SEREGIN A M	10	SHMIGLYUK M I	23
RUMYANTSEV V D	16	SERGEYEV N A	71	SHNIP A I	41
RUMYANTSEVA V D	36	SERGEYEV V N	74	SHOTOV A P	72,77,81
RURUKIN A N	11	SERGIYENKO M I	26	SHPIGEL'MAN S D	36
RUSANOV V D	63	SERIKOV R I	12	SHPUNTOV A I	55
RYABININ I V	62	SERKIN V N	23,31,39	SHTYKOV N M	25
RYABOV A S	42	SEROV O B	57	SHUBIN M V	4
RYABOV YE A	74	SERZHANTOV V G	79,80	SHUBIN N I	13
RYAZANTSEVA T A	37	SESYAN R P	70	SHUBNIKOV YE I	56
RYCHEV M V	74	SHABIYA A V	70	SHUGAN I V	51

SHUGAYEV M M	50	SOKOLOV S N	6	SUTORSHIN V N	65
SHUL'GA S N	46	SOKOLOV S V	63	SUVOROV A YE	22,34
SHUMAY I L	79	SOLDATOV A N	12	SVAKHIN A S	17,43
SHUMOVSKIY A S	23	SOLNTSEV V P	1	SVANIDZE M M	55
SHUMYATSKIY P S	63	SOLODKOV A F	6	SVERDLOV A I	6
SHURGAYA R R	60	SOLODOV A M	78	SVERDLOV L M	80
SHUVALOV L A	78	SOLODUKHIN A S	10	SVESHNIKOVA YE B	2,93
SHUVALOV V V	7	SOLODYANKIN V V	86	SVIRCHEV N YE	86
SHVARTS P	71	SOLOMATIN V A	95	SVIRID V A	61
SHVEYKIN V I	6	SOLOV'YEV V R	13	SVIRIDENKOV E A	72
SILANT'YEV A YU	91	SOMMER G	90	SVISTUN M I	47
SILKIN N I	1	SOMS L N	94	SYCHUGOV V A	17,43
SIMAKIN A V	85	SOPINSKIY N V	56	SZUSTAKOWSKI M	43
SIMEONOV V	20	SOROKA A M	8	SZYDLAK J	3
SIMONENKO Z G	52	SOROKIN V B	8		
SIMONOV A P	59	SOROKIN V N	85	TABARIN V A	19
SIMONOV A V	32	SOROKINA I T	4	TAGIYEV Z A	26
SINIKAS A G	7	SOSNINA G F	58	TAKHTAROV B V	55
SINITSA L N	73,80	SPICKERMANN G	22	TAMULAYTIS G	66,67
SINITSYN M A	5	SRESELI O M	67	TARASASHVILI V I	56
SINKEVICH V I	42	STABINIS A	32	TARASENKO V F	11
SINTYURIN G A	91	STAMATESCU L	87	TARASOV I S	6
SINYAVSKIY D V	5	STAN'KO N G	78	TARLYKOV V A	65
SINYAVSKIY E P	24,94	STANKOV K	17	TASHPULATOV Z T	37
SIRUTKAYTIS V	32	STARIK A M	12	TATARENKO V M	63
SIVAKOV A G	69	STARIKOV A D	18	TATARINOV E YE	14
SIVUKHIN D V	95	STARIKOV YE V	5	TELEGIN G G	59
SIYUCHENKO O G	30	STAROV A V	24	TEREKHIN A V	77
SIZOV N I	47	STARODUBTSOVA M P	69	TERENETSKAYA I P	75
SKACHKOV A N	58,59	STAROSTIN N V	31,93	TERENT'YEV YU N	3
SKADAREVICH A P	2	STAROVOTOV S F	19	TERLETSKAYA S V	50
SKAKUN V S	11	STASEL'KO D I	56,62	TERNOV I M	95
SKARZHEPA V A	42,43	STASHKEVICH A A	30	THIELECKE W	18
SKLIZKOV G V	52,89,90	STAVROV A A	32	TIEBEL R	23
SKOBLO YU E	11	STAVROVSKIY D B	13	TIKHODEYEV S G	28,63
SKOCHILOV A F	57	STEIMBRECHER G	86	TIKHOMIROV G P	19
SKOK E M	87	STEL'MAKH M F	32	TIKHOMIROV S V	43
SKOROMNIK D E	43	STEPANOV A I	4,35,94	TIKHOMIROV V A	50
SKRIPKO G A	1,2,71,93	STEPANOV A N	59	TIKHOMIROV V V	18
SKRIPNIK N A	78	STEPANOV A O	68	TIKHONONVA N P	85
SKRYL' I I	64	STEPANOV S I	58	TIKHONOV A V	42
SKVORTSOVA G V	11	STEPANOV V V	85	TIKHONOV YE A	7,31
SLABKO V V	25,26	STEPANOV YE V	72,81	TIMEN G E	37
SLEPCHENKO G N	81	STEPANOVA A V	62	TIMOFEYEV F N	5
SMAYEV V P	55,57	STORASTA YU	71	TIMOFEYEV T T	11
SMAYEVA S A	56	STRAMSKA H	26	TIMOFEYEV V D	73
SMEREKA A S	44	STREL'CHENYA V M	10	TIMOFEYEV V V	30
SMIL'GYAVICHYUS V	28,32	STROKACH N S	79	TIMOFEYeva E YE	55
SMIRNOV A V	49	STROKOVSKIY G A	15	TIMONIN V V	78
SMIRNOV A YU	7	STRONSKIY A V	56	TIMUS C	19
SMIRNOV I A	20	STROYNOVA V N	49,78	TINCHURINA E G	76
SMIRNOV M G	52	STRUGANOVA I A	31	TIROV SH D	23
SMIRNOV V A	2,4,65,80,81	STUCHEBRYUKHOV A A	59,77	TKACHEV V D	68
SMIRNOV V L	38,39	STULOV L D	51	TKACHUK A M	31,80
SMIRNOV V N	15	SUBBOTIN V I	89	TKAL' V A	84
SMIRNOVA A S	38	SUBOTINOV N	38	TOKER G R	10,63,90
SMIRNOVA Z A	8,82,84	SUKHANOV V B	12	TOLEUTAYEV B N	31,75
SMOLENSKIY G A	80	SUKHANOV V I	54,56	TOLKACHEV A V	65
SMOLOVICH A M	58	SUKHAREV B V	30	TOLKSDORF D	38
SMUROV I YU	86	SUKHAREVA L K	4	TOLMACHEV A I	8,53
SMUTNYY F	80	SUKHODOLA A A	58	TOLMACHEV YU A	12
SMYK A F	38	SUKHODOL'SKIY A T	71	TOLOKONNIKOV V A	61
SNEGIREV YE P	77	SUKHORUKOV A P	30,53	TOlstik A L	52
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SOKOLOV A V	77	SURSKIY K O	27	TOVBIN B S	36
SOKOLOV N S	68	SUSHILOV N V	22	TOVMASYAN S K	60
SOKOLOV S A	50	SUSLOV A I	75	TOVSTIK P YE	18

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TROITSKIY V O	12	VASIL'YEV M G	6	WRINGE H	44
TROITSKIY YU V	10,19	VASIL'YEV P YE	65	WURBS G	41,43,44
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TRUKAN M K	6	VASIN A P	52	YABLONSKIY G P	75
TRUNOV V I	1	VAS'KO F T	31	YAGUDIN SH I	1
TRUSHIN S A	10	VAYNER G M	86	YAKHNICK A K	44
TRZESOWSKI Z	35	VAYSLEB YU V	40	YAKHNIN V Z	27
TSARENKO B V	4	VAYTEKUNAS F K	22	YAKOVLENKO S I	11,25,89
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TSELYKOVSKIY A F	11	VEDERNIKOV V M	51	YAKOVLEV V V	65
TSEENTER M YA	73	VENIAMINOV A V	57,58,64	YAKOVLEV YU P	5,69
TSIKARISHVILI E G	90	VENUS G B	76	YAKUBOV A N	53
TSIKUNOV V N	25	VERENIK V N	79	YAKUBOVICH S D	6
TSITKIN A I	75	VERESHCHAKA A I	50	YAMALETDINOV A G	20
TSNOBILADZE N A	18	VERKHOVSKAYA K A	71	YANCHARINA A M	11
TSVETKOV YE G	1	VESNIN V N	18	YANISH YU V	36
TSYGANOVA YE V	73,80	VESSLER G R	71	YANKAUSKAS A	32
TUGOV I I	60	VETCHINKIN S I	72	YANKELEVA I I	26
TUMANOVA L A	18	VETROV A A	50	YANKOVSKIY A A	86
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TURYANITSA I D	80	VINNICHUK P V	37	YATSENKO A V	71
TUTUNARU M	86	VINOGRADOV A V	46	YAVICH B S	5
TYAKHT V V	78	VINOGRADOV I P	13	YEDVABNYY I V	84
TYCHINSKIY V P	61	VISHERATIN K N	47	YEFIMKOV V F	52
TYLETS N A	32	VISHNEVSKAYA L V	18	YEFLOV V B	47
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		VLADIMIROV F L	21	YEGOROV K D	7
UDALOV YU B	10	VLADIMIRTSEVA L A	84	YEGOROV V K	81
UDAL'TSOV B V	9	VLASOV R A	24	YEGOROV V S	13
UFIMTSEV V B	88	VODOP'YANOV L K	80	YELAYEV V F	12
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USTINOV V M	5	VOVK S M	73,80	YEZHOV V A	44
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